

# Successful Workplace Learning: How learning happens at work

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This report analyses and discusses findings from a study of training programmes at six different workplaces, across four different industry sectors, around the country. Our research team visited each workplace, observed training sessions or training-related activities, and interviewed a range of people who were participating in the training, or leading and supporting the training programme and trainees. The research was funded by the Tertiary Education Commission and conducted by NZCER for the Industry Training Federation. Six ITOs were contract partners: Building and Construction ITO, Careerforce, Horticulture ITO, Retail Institute, Skills Active and Pharmacy ITO. Waikato University was contracted to deliver a literature review early in the development of this project, which helped shape its design. The subtitle of the project—*how learning happens at work*—underscores the focus on the conditions, strategies, and activities of workplace learning. The main title—*successful workplace learning*—underscores our focus on the kinds of conditions, strategies, and activities that make workplace learning successful in a range of ways including employee retention and motivation, qualification completion, employee participation in communities of practice, and workplace productivity.

### Researching workplace learning as industry training

The impetus for this research came from the comparatively under-researched and under-recognised status of workplace learning. Yet workplaces are increasingly important as sites of learning within a framework of lifelong learning that is shared by many (post)industrialised countries today and driven by demographic changes that place new pressures on workforce development. In its most structured form in New Zealand as industry training, workplace learning has seen increased participation at rates above those of its tertiary education counterparts. Yet little is known about workplaces as learning sites and learning processes on-the-job.

Our research questions therefore aimed at getting to grips with the different and sometimes competing imperatives of learning and producing, and the different and complex contextual arrangements for learning—both of which inevitably impact on what we can recognise, observe, and analyse in terms of learning and teaching. Our questions were:

- What are the teaching and learning practices—and their effects—in workplaces where people are engaged in getting their qualifications?
- What is the variety of different successful models that people use in these different workplaces?
- How can such learning be enhanced?

We took a case study approach, taking into account themes about learning, production imperatives, workplace conditions and the wider context, in order to gain a rich understanding of the teaching/learning processes in each workplace and how these were related to learning outcomes. Importantly, we were not studying whether learning had occurred or whether it was successful. This project was not an evaluation of particular workplace learning programmes. Rather it was designed to look at some of the best cases of “successful” workplace learning and what made them so.

We worked with the ITF and partner ITOs to develop the scope of the project and recruit six workplaces:

- 1 **A homecare provider** attached to a not-for-profit community organisation providing a range of services for people who are older, homeless, disabled, or requiring family support. The learning programme at this workplace was very structured and programmatic.
- 2 **A small building and construction company** owned by a builder who is now “off-the-tools” and uses his time to co-ordinate the work of his employees and guide the training of his apprentices. The learning programme at this workplace was ‘on-the-job’ and linked to the modern apprenticeship.
- 3 **A swimming pool** attached to a group of leisure centres owned by a city council that provides a range of public swimming services and related facilities such as pools, swimming lessons, sauna, cafe, childcare, and fitness centre. The learning programme at this workplace combined formal instruction in programmes with learning ‘on-the-job’.
- 4 **A small landscaping business** owned by a long-time landscaper who employs a “leading hand” and an apprentice and is well-known throughout the industry for the quality of his training. The learning programme at this workplace was primarily ‘on-the-job’, but included some formal workshop instruction.
- 5 **A tourism provider** owned by a larger company with a small permanent workforce and a large seasonal one which aims to offer a “world-class snow experience”. The learning programme at this workplace combined formal instruction in programmes with learning ‘on-the-job’.
- 6 **A vineyard** owned by a large corporate entity that produces grapes for different wine brands, with a small staff that expands to include seasonal workers. The learning programme at this workplace was ‘on-the-job’.

Our approach engages directly with the “paradox of the case study”—to reveal both the unique and the universal and create a unity of understanding (Simons 1996)—in that we have tried to acknowledge, respect, and elucidate the unique models, demonstrations, and adaptations of workplace learning in each individual workplace and secondly, to consider the commonalities across all six workplaces and what we can learn from them as a group about how learning happens at work.

To bring together the unique and the universal in terms of how learning happens at work, we used a framework based on two main ideas: *learning as participation* and *different and multiple perspectives on success*. The idea of learning as participation is that learning is social, with individual elements of acquisition, rather than solely individual, and that learning comes from experiencing, and participating in, daily life—in this case, participating in the relations, content, and context of work. It includes the possibility that learning might involve the body as well as the mind and therefore context becomes important and learning becomes *situated*. From the point of view of the research, it means that the research focus, or unit of analysis, is the workplace—the tools and artefacts used, the relationships between people—and not just the individual learner. Hence we observed learners and learning in context wherever possible.

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We also needed to understand different and multiple perspectives on success because obvious success markers like employee retention and qualifications completion, and less obvious markers like employee confidence, improved workplace climate, and employer contribution to industry development were so closely related to the different views about workplace learning's purposes (what is it for?), participants (who is it for?), and desired outcomes (what would successful workplace learning be like?). We therefore interviewed people who were involved as current learners/trainees and teachers/trainers, but also those who were involved as employers setting the overall framework for training programmes, training managers setting the conditions and overseeing training programmes, and official or unofficial mentors who had completed training or reached experienced worker status and supported newer or less experienced workers.

### Learning principles and processes

We found no one model of successful workplace learning but we did find common principles involved in the approaches of different workplaces. We observed similar kinds of processes going on, as well as unique adaptations to different circumstances, work conditions, workforces, and business models. The principles involved:

#### 1. Support at the organisational level

Firstly learning was prioritised through policies and structures. These were not merely written documents; they were "made practical" through having a dedicated person with the interest and authority to promote learning in the workplace. An important part of that role involved creating opportunities that learners could take up as "affordances" to really learn.

Support also occurred through the provision of quality resources. The workplaces provided learners with workbooks and guides that were pitched at, and adapted to, the level of the learner. They also provided the key resource of time. This meant that learning was not routinely pushed aside when other things appeared to be more important.

All six workplaces also had organisational level support through mechanisms to reward learning success. Mechanisms ranged from public recognition, such as graduation ceremonies, to invitations to participate in more concrete problem-solving with other experts (e.g. becoming part of the community of practice of builders), to development of career pathways, to informal acknowledgement of a "job well-done".

#### 2. Having structured orientation to the job

The learners in all six workplaces began work with a clear awareness of a learning structure at work and clear expectations about how that learning fitted with their job. People were never "dropped" into their roles. Instead they were given time to settle in. They were often paired with a buddy who could guide them. Learners became engaged in the process of starting work and structured learning, and knowing what questions to

ask, who to ask them of, and when to ask.

#### 3. Using good teaching strategies to support structured learning activities

The workplaces had a clear idea of the skills and practices they wanted their learners to develop and they did not leave the teaching to chance. Although they had some teaching strategies in common, they also differed in the emphasis given to formal learning in classes and to learning 'on-the-job'.

With formal learning in classes, the teacher approaches supported meaningful learning through

- Clear expectations and processes (e.g. lesson purposes and intentions written up for everyone to see; teachers conveying the norms of the community of practice that learners would join)
- Learner-to-learner and tutor-to-learner interaction (e.g. teachers built social connection with learners; peer learning culture was encouraged; feedback was given during learning activities)
- "Real" learning (e.g. teachers activated learners' current knowledge and linked it to new learning; teachers developed learners' understanding, rather than simply "covering" the material)

#### 4. Learning from experience

Where 'on-the-job' learning was emphasised, there were many clear examples of "scaffolding", where temporary support for the learner was provided and then gradually "dismantled" to allow more independent problem-solving activity by the learner.

Mentoring by experts or seasoned workers was critical to scaffolding in most of the workplaces. As a structured version of guided learning at work, mentoring is associated particularly with enculturation, employee retention, learning tacit knowledge (the "tricks of the trade"), and fostering the move from peripheral to full participation in communities of practice. We saw many examples of this, especially where employers considered that good workplace performance requires more than the completion of qualifications. Each workplace had its own approach to "how we do things around here" and formal and informal mentoring was used to support new workers to gain access to this knowledge. We also saw that mentors were carefully selected for the role according to their skills and attributes.

#### 5. Use of formative and summative assessment

Formative assessment was ongoing at each workplace, and part of formal and informal mentoring. Through this, the learners had many opportunities to get feedback on all aspects of their work, were given advice on how to progress towards the awarding of specific unit standards and qualifications, and were encouraged to take responsibility for this progress.

## Implications for tertiary stakeholders

In most of the workplaces we studied, learning was more than getting qualifications. We observed, and heard about, attempts to take “work” beyond the repetition of everyday tasks to engagement with increasingly more complex tasks or tasks with a higher measure of accountability. The workplaces did this by carefully combining and sequencing routine and non-routine tasks to create problem-solving challenges and rich learning experiences (Billett, 2001) so that learners could move from peripheral to full participation (Lave & Wenger, 1991). In this sense, the workplace can be understood as a “landscape of learning” (Nielsen and Kvale, 2005).

### 1. There is a critical interplay between workplace structures and workplace (teaching and learning) practices

Our focus on observing “what happens” with learning in workplaces, and on interviewing a range of people about that, highlights the need for tertiary stakeholders to understand workplace learning not only in terms of the *structures* of each organisation but also in terms of the *practices* in each workplace. Felstead et al (2009) argue that the dynamic interplay between structures and practices in workplaces cannot be accounted for by business size and industry sector alone, nor by employee dispositions and biographies. Instead a meaningful understanding requires attention to the particular contextual factors for each workplace.

We would also add that an understanding of the teaching and learning practices is crucial because workplace conditions and structures help determine the character (and quality) of the teaching and learning that occurs (for example, learner persistence is not just an individual trait; it can be strengthened by workplace practices like mentoring). Just as learning is only as good as the opportunity to actively apply and develop competencies and participate in the workplace community, opportunities are only as good as their affordances—that is, their possibility for realisation or action. We saw examples of workplaces affording opportunity by aligning learning priorities at a policy level with practices that supported learners to perceive opportunity, undertake training towards qualifications, and complete the qualifications.

### 2. Teachers and trainers have a key role

We also found that, although teachers or trainers in workplaces rarely have teaching-specific qualifications, their role is critical to the success of workplace learning. Trainees appreciated their trainers’ efforts, citing these as significant in their confidence to undertake, as well as ability to complete, qualifications. For several trainers, workplace teaching commitment was linked to a broader principle such as industry reinvigoration or wanting to pass on the opportunities they had once had. Given the importance of the role of teachers in workplace learning we have found in our case studies, there is scope to consider what support

can be given to people who take or are given this role in organisations and what role ITOs might play in this.

### 3. Learning is for participation at work

In addition to focusing on what happens in workplaces, we now also know more about learning—namely that it can and does occur in non-institutional settings, within a participatory paradigm of learning, which still includes some aspects of the acquisition paradigm (people do know things in their heads) but focuses on the learning as valuable and fully expressed in its performance or mobilisation. From what our research team observed, and from what we discussed with participants, all of the workplaces carried a strong presumption of learning *for* something. There was no sense of “learning for learning’s sake” or accumulating knowledge “for its own internal value”. Repeatedly trainees and experienced workers told us about what learning helped them to do, how it allowed them to *do* it better than before, and the kind of access it gave them to *doing more with* others at work or in the industry.

### 4. Success is also about participating in society

Although it was not the focus of this study, interviewees also told us about what their learning allowed them to do in other ways, beyond participation in the workplace. Learners across the workplaces suggested that their workplace learning was opening up possibilities for them to be, or do, things they valued in their lives. These wider, more social outcomes to workplace learning move the skills policy debate, and questions over where learning does or should occur, beyond concern with its more immediate productive outcomes to an interplay of institutions, structures and practices that enable people to participate more broadly as citizens in society. This broader interpretation of the outcomes of successful workplace learning resonates with recent work in the European Union in linking human capabilities to social policy that supports an economic policy drive towards knowledge-based economies. It also resonates with work in the New Zealand context by Bryson and O’Neil (2010) on the developing human capability at work framework. Stakeholders engaged with workforce preparation and workforce development might note that building human capability is also a cornerstone of career development theory which links career guidance to workforce development through the framework of career and life management policies and practices. Stakeholders interested in creating more awareness of industry and trades training options for young people in particular might want to take note of the range of people’s motivations and aspirations below the surface of an expression of interest in a particular industry area.

### 5. Knowledge and skill are not always what we assume

The implications of this study go beyond what we have learned about how learning happens at work. They extend to the process of learning itself and to our conceptualisations of knowledge. By seeing learning as

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contextualised and participatory, we are led to question assumptions—shaped by our experiences, and the accepted place, of institutionally-based education—about how knowledge and skill can be developed and applied. We still see evidence of experiential learning being considered second-rate because of its inductive nature (bottom-up, based on observation and experience), rather than taking a deductive (general and theory-based) form favoured by institutionally-based education. We also see how assumptions about the value of certain forms of education relate to the way that we perceive the value and skill level of different types of work. We researchers were forced to reverse a preconception that we had held about the skill levels of the workers/learners that we later observed. Although the occupational classification of workers used by New Zealand Statistics in the six workplaces defined most of them as low-skilled, we saw that some roles involved high levels of judgement and involved significant and complex “emotional labour” (Hochschild, 1983) that is often unrecognised because of the role that certification plays in determining perceived market value of skills.

### 6. Workplace learning both reinforces and challenges institutionally-based education

Our research has also underlined the “long reach” of institutionally-based education, with half of our workplaces employing a classroom-based approach common to institutional settings. It also signals the possible transformation of institutionally-based education because our workplaces combined classroom approaches with on-job learning and, since learners were also employees, the classroom-based work was immediately relevant and obviously “real life”. Studies of formal, informal and nonformal elements in workplace learning do suggest that these different forms of, and contexts for, learning occur “naturally” in combination. So

it becomes an important challenge to consider how to recognise and study the nature of the informality and formality, the balance between them, and the implications of the balance—something that is particularly important in a labour market with changing requirements.

Once we open up our understanding of how learning happens at work, and therefore how learning happens at all, we get a taste of how people's roles are expanding, or need to, for a modern society. In a modern society, the roles of workplace and educational institution blur because employees increasingly need forms of knowledge that cannot be learned only “in practice” (on-job without any theoretical background or principles) and institutions cannot any longer prepare people in any final or fixed sense for something that can be predicted to happen later. We hope that this research provides a good basis for stakeholders' thinking about the importance of the workplace to promote learning, production and human capability.

This report analyses and discusses findings from a study of training programmes at six different workplaces, across four different industry sectors, around the country. Our research team visited each workplace, observed training sessions or training-related activities and interviewed a range of people who were participating in the training, or leading and supporting the training programme and trainees. The subtitle of the project—*how learning happens at work*—underscores the focus on the conditions, strategies and activities of workplace learning. The main title—*successful workplace learning*—underscores our focus on the kinds of conditions, strategies and activities that make workplace learning successful in a range of ways including employee retention and motivation, qualification completion, employee participation in communities of practice, and workplace productivity.



## Introduction

### Workplace learning and the tertiary education sector

The impetus for this research came from the comparatively under-researched and under-recognised status of workplace learning. The most structured provision of workplace learning in New Zealand operates through the industry training system, arranged and managed by Industry Training Organisations (ITOs), that are funded by the Tertiary Education Commission (TEC) and their industries, and in turn broker training arrangements with employers (who are actually the training providers). Industry training is therefore part of the tertiary education sector but distinctively involves learning that mainly occurs on the job.

Over the past decade New Zealand has followed international public education developments and shifted its policy focus from one of encouraging increasing participation in tertiary education to one of maximising the state's return on its investment in education. New Zealand is unique in clustering the funding for community, vocational and academic funding together within the one centralised body, the TEC. Such clustering reflected an ideological shift within government from a belief in a deregulated, market-based system of provision (on the assumption that such provision would be in line with economic sector needs for workforce reproduction), to one that recognised publicly-funded tertiary education as a tool for national economic growth. Operationally, the Government signals its intent through a tertiary education strategy which in turn sets out the role for the TEC as the "proactive steerer" of the tertiary education system (Ministry of Education, 2006). While industry training is formally part of the tertiary education sector through this funding model, ITOs have to argue for, and justify, the levels of funding for industry training within the overall tertiary education strategy. The industry training sector is, however, at some disadvantage at this political level because its workings are less known and understood than those of its historically dominant, institutionally-based tertiary education counterparts (universities and polytechnics).

The number of industry trainees has grown significantly over the past decade. The number of industry trainees was over 200,000 in 2009, a 147 percent increase from 2000. In contrast, those studying in tertiary education institutions in 2009 numbered 469,000, an increase of 138,000 or of 41 percent since 2000. The number of employers participating in industry training has almost doubled over the last decade to nearly 35,000 in 2009<sup>1</sup>. The Ministry of Education has begun a programme of statistically analysing industry training data, acknowledging that industry training has grown at a faster rate since 2000 than other forms of tertiary education but that we know little about it in terms of quantitative data and analysis (Mahoney, 2009a). Indeed, one of the Industry Training Federation's (ITF) remits has been to demonstrate that while industry training began as a small part of the tertiary sector, it is now a significantly larger part and possibly deserving of a greater share of government tertiary funding (Industry Training Federation, 2010).

Increasing attention on industry training in New Zealand reflects the way that workplace learning has become a significant force in the tertiary education sector. It also reflects interest in the workplace as a site of learning within a framework of lifelong learning shared by many (post)industrialised countries today. A major driver for lifelong learning is demographic changes (namely ageing populations) that place new pressures on workforce development policies and practices. As such they demand new conceptualisations of the relationship between individual, employer and state (Field, 2000), and new ways to understand and harness informal and nonformal learning (Misko, 2008):

**a paradigm shift from the dominance of traditional education institutions towards a diverse field of traditional and modern learning opportunities that are more process and outcome oriented and follow modular structures can be observed ... This—and the recognition of the value of various forms of learning—also pinpoints the considerable relevance of learning taking place at the workplace. (Gruber, Mande, & Oberholzner, 2008, p. 6)**

So although learning has not typically been seen by companies as their core business, it is becoming increasingly relevant to them because learning can no longer be the front-loaded and school-based opposite of being productive; instead it has become a key indicator and driver for productivity (Vaughan, 2008). This means that workplace and employment relations practices that incorporate learning are a positive contributor to economic development, not a constraint on the ability of firms to grow (The Office of the Prime Minister, 2002). Furthermore, productivity gains appear to be highest in workplaces with cultures that support and promote learning and when other changes that support learning "are made in skills, innovation, workplace organisation, management capability and employee engagement and motivation" (Harvey & Harris, 2008, p. 7).

1. See: [http://www.educationcounts.govt.nz/statistics/tertiary\\_education/participation](http://www.educationcounts.govt.nz/statistics/tertiary_education/participation).

## Studying workplace learning through industry training

Although interest in non-institutionalised learning and learning through life is growing, studies on industry training in New Zealand are few and far between. There are some qualitative studies of learner perspectives, focused on the industry training experience or on the development of worker-learner and vocational identities (Chan, 2010; Industry Training Federation, 2007; Moses, 2010; Piercy, 2009; Vaughan, 2010). There are also some studies looking at structural aspects of industry training as a system (Cochrane, Law, & Piercy, 2007; Piercy, 2003) or the way that industry-based teaching, assessment and learning is systematically organised and supported (Vaughan & Cameron, 2010a, 2010b). However, there is a general paucity of New Zealand-based research on industry training in comparison to forms of, and contexts for, tertiary education, particularly as that provided through universities and institutes of technology and polytechnics.

One of the reasons for this is a relative lack of awareness about industry training. Another reason is the lesser esteem in which it is held. The latter is at least partly because industry training is focused on lower levels of qualifications on the New Zealand Qualifications Framework. The former is at least partly because workplace learning is often seen as “just doing the job” rather than learning and because education and industry have been in an opposed relationship throughout much of the 20th century. The impact of that has been such a close association in people’s minds between the word “learning” and formal classroom settings, that it is difficult for them to appreciate that learning might occur in other, often less formal, settings such as the workplace (Eraut, 2000). Even within the workplace learning domain, research has tended to focus on professional workers and how they acquire expertise (e.g. teachers, nurses, accountants) or on how work is organised in particular sectors (e.g. manufacturing, health) rather than focusing on how nonprofessional workers learn at work (Felstead, Fuller, Jewson, & Unwin, 2009).

Yet a good deal of adult learning in life occurs through work. Workplaces are potentially a rich source of learning, just as educational institutions are (Ryan, 2008). Much of the learning that does happen on the job occurs through explicit activities that make use of a range of pedagogical methods (Fuller & Unwin, 2002), although it is unlikely to occur against a background of professional teaching qualifications and knowledge. Learning on the job points to the importance of the context of the learning environment:

**Rather than being simply a change in the properties of the learner ... the main outcome of learning is the creation of a new set of relations in an environment. This is why learning is inherently contextual, since what it does is to continually alter the context in which it occurs. (Hager, 2004, p. 246)**

Actual “success” in workplace learning is a function of many interdependent factors to do with the learner, workplace conditions, business strategy and structure, training programme structure, trainer competence and teaching/

learning approaches and activities. And training on its own is limited in its ability to increase productivity unless combined with other interventions such as enhanced managerial capability, employee engagement, improved employee recognition and reward and innovative production practices (Harvey & Harris, 2008). Learning is only as good as the opportunities to actively apply and develop skills and competencies and participate in the organisation and culture of work/workers.

## A case study of six workplaces

**To understand more fully the qualities and potentials of workplaces and work practices as worthwhile environments in which to learn, it is necessary to capture their pedagogic qualities, that is, how learning arises through work. Certainly, there is a long held acceptance of the value of learning through practice and through workplace experiences. Plato describes the process of learning to become artisans and artists as that occurring through association, imitation and practice, starting with play, within the family of artists and artisans and in the circumstances of practice. (Billett, 2008, p. 6)**

Our research design is one that gives us a rich understanding of the teaching/learning processes in each workplace and how these were related to learning outcomes. We were guided in this by our research questions, developed in consultation with the ITF, Waikato University<sup>2</sup> and partner ITOs (Skills Active, Building and Construction ITO, Careerforce, Horticulture ITO, Retail Institute and Pharmacy ITO):

- What are the teaching and learning practices—and their effects—in workplaces where people are engaged in getting their qualifications?
- What is the variety of different successful models that people use in these different workplaces?
- How can such learning be enhanced?

In order to answer these questions, we decided not to choose one single theorist but to create a theoretical lens based on prominent themes identified in the learning and workplace learning literature by recognised commentators such as Sfard (1998), Hager (2004), Fuller and Unwin (2003), Felstead et al. (2009), Billett (2008) and Felstead and Ashton (2004), and to consider these themes in terms of their implications for research strategy and design. As a recent CEDEFOP (European Centre for the Development of Vocational Training)<sup>3</sup> report points out, around 94 percent of workers’ time spent learning is through performing tasks on the job, some of which may never be recognised or assessed precisely because they are everyday work tasks (Gruber et al., 2008). This means that studying workplace learning necessarily involves getting to grips with the different and sometimes competing imperatives of learning and producing, and the different and complex contextual arrangements for learning—all of which inevitably impact on what we can recognise, observe and analyse in terms of learning and teaching. Thus our overall approach was similar to Felstead et al.’s (2009) WALF (Work as Learning Framework) approach in that we attempted to “traverse a series of analytical layers of enquiry” (2009, p. 1) that necessarily focused on the conditions, strategies,

2. Waikato University conducted the initial literature review for this project.

3. CEDEFOP is the Centre Européen pour le Développement de la Formation Professionnelle.

principles and particularities of work tasks (as that was a large part of our brief), but also investigated these within the wider context of the changing world of work and the pressures faced by businesses, particularly during a recession.

We settled on a case study approach in order to take into account themes about learning, production imperatives, workplace conditions and the wider context. The “cases” to be studied would be workplaces and our methods would involve observation and interviewing in order to give us multiple sources of data and multiple perspectives. Importantly, we were not studying *whether* learning had occurred or *whether* it was successful. This project was not an evaluation of any workplace learning programme or approach. Rather it was designed to look at some of the best cases of “successful” workplace learning and what made them so.

We were able to cast our net fairly widely for recruitment of workplaces across a range of businesses in different industries, thanks to our partner ITOs in the research; Skills Active, Building and Construction ITO, Careerforce, Horticulture ITO, Retail Institute and Pharmacy ITO. We ran an initial workshop with the partner ITOs to discuss and refine, and reach shared understandings about, what constituted “success” and therefore what kinds of workplaces to recruit for participation in the research. By the end of the workshop, ITOs were able to make firm suggestions about appropriate workplaces, most ITOs having also already talked with some of those workplaces to ascertain their willingness to be involved. The participating workplaces were all known by their ITOs to be successful in the sense of credit and qualifications completion, commitment to training and good teaching/learning strategies.

With the ITOs’ help, we recruited six workplaces that would host a visit and allow us to observe training sessions or training-related activities and to interview a range of people in the workplace. We made sure that our sample covered some of the important dimensions that affect workplace learning such as differences in size (number of employees), corporate structure, learner backgrounds and motivation, customer/client orientations, industry area and working conditions, and learning programme structure and style.

Several things formed the basis of our interviews and observations in each workplace—the WALF framework and other theoretical work, teaching/learning expertise in our team of education researchers, and workplace learning literature reviews from the New Zealand Council for Educational Research (Vaughan, 2008) and Waikato University (Harris, Piercy, & Law, 2009), which focused particularly on pedagogical matters.<sup>4</sup>

We designed our interview schedules and observation focus to look at:

- characteristics of learners, workers and employers, including previous learning or teaching experience
- where learners are located within the workplace hierarchy
- how people view their job and tasks, and the industry
- access to learning, qualifications, promotion, training and assessment roles
- affordances and opportunities to learn, practise and deploy skills
- employment arrangements tied to learning participation
- the development of learning/teaching programmes, including induction and mentoring
- people’s desired benefits and outcomes from learning (or training or mentoring)
- how learning is supported, and any links between formal, informal and nonformal learning.

Our final sample of six workplaces is summarised in the following table.

The left-hand column indicates key dimensions of each workplace that are developed across each row (e.g. “business type”, “learning plan”, “assessment” etc.). Each of the other six columns provides key information about each workplace. Note that several of the workplaces were single-site locations for the purposes of our visit but also formed part of a business or corporation with multiple site locations (see “location and organisation”).

We defined a “workplace” in terms of a site or physical location in which people consistently worked together. In many cases a workplace also constitutes a business or the entirety of an organisation. However, businesses may also be spread across several sites and workplace-based or site-based practices may be linked to the practices of a larger business. In our sample of six workplaces, four were sites belonging to a larger corporate business and had an overall learning programme designed and managed at corporate level, with operational management and delivery at the workplace level. It is also worth noting that workplace size can also be malleable. Five of the six workplaces are small-to-medium-sized enterprises (SMEs); however, two of these grow into large-scale operations for seasonal work.



4. The Waikato University (Harris et al., 2009) literature review was conducted for an earlier iteration of this research.

**Table 1: Six workplace case studies workplaces**

Business type	Homecare	Building & construction	Landscaping
Location & organisation	Auckland, belongs to NZ-wide community trust	Wellington	Waikato
ITO	Careerforce	BCITO	Horticulture
Organisation size & trainees	Large 260 staff	Small. Owner + 5 carpenters (3 are apprentices) and 1 office person	Small. Owner + 3 landscapers (1 apprentice)
Learners	Few/no previous qualifications; low literacy/numeracy. High proportion Pacific, Māori	Range—school qualifications and post-school qualifications	NC L4 to L4 (advanced)
Learning plan	Compulsory induction. NCs at L1–4 offered. Annual compulsory refresher training	NC L4 Carpentry apprenticeship. Specified in contract; according to work available + polytechnic night classes or workbooks in own time	NCs L1–4 in Horticulture Landscaping according to work available and negotiated on regular basis
Training times & locations	Onsite group classes (weekends)	OTJ just-in-time + polytechnic night classes	OTJ just-in-time + polytechnic block courses
Assessment approach	WPB assessor and roving assessor	WPB assessor	WPB assessor

Abbreviations used: WPB (workplace-based) OTJ (on the job) NC (National Certificate) NCEA (National Certificate of Educational Achievement) ITO (Industry Training Organisation) L1–4 (Levels 1 to 4)

### 1. The homecare provider

Homecare Inc.<sup>5</sup> is a not-for-profit community organisation providing a range of services for people who are older, homeless, disabled or requiring family support. It collaborates with, and provides advice to, a number of other community and government service providers. For the purposes of this study, we focused on one workplace, dedicated to providing in-home services through a contract to a district health board. One of Homecare Inc.'s strategic objectives is to challenge social injustice and provide hope to the wider community. The organisation singles out its training as part of this objective; most of its staff have not had other formal learning opportunities in life since secondary school. Homecare workers are described in Homecare Inc.'s promotional material as “the heart and soul” of the service.

### 2. The builder

James Boeing has been a builder since leaving school and has been self-employed for 28 years, employing apprentices for 25 of those years. He is “off the tools” now, using his time to co-ordinate the work of his employees and guide the training of his apprentices. The company is known for the quality of its building work, with most of its work coming through two architects. The culture of the firm is one of pride in workmanship, of care and attention to detail to all work—be it “background” or “finished work”—and attention to clients' needs.

### 3. The landscaper

Dig This is a small landscaping business located in a provincial town. George the owner has been in the landscaping business for many years, entering the landscaping business as a subcontractor to a paving business. His business is well-known locally for producing innovative, quality landscaping. George has family in the town and is well-known locally, thus a “reputation effect” is important for his business because word gets around as to whom one goes to for good-quality work. In addition to the responsibilities of ownership, George remains “on the tools”; that is, he actively participates in the activities of landscaping. He employs two landscapers; one as a leading hand, and the other as an apprentice. George is well-known within the industry for the quality of his training—one trainee recently had achieved national recognition as Young Landscaper of the Year and Young Horticulturalist of the Year.

5. We use pseudonyms to refer to the workplaces, companies and individuals interviewed in this subsection and throughout this report.

Business type	Vineyard	Tourism	Swimming pool
Location & organisation	Marlborough, belongs to NZ-wide corporate group	Otago, belongs to South Island corporate group	Auckland, belongs to region-wide trust
ITO	Horticulture	Skills Active	Skills Active
Organisation size & trainees	Small becoming large at times. 12 permanent staff + 600 seasonal workers	Small becoming large at times. 50 permanent + 1,000 seasonal workers	Small becoming medium-sized at times. 16 permanent staff + 20 seasonal workers
Learners	Range—including no qualifications and low literacy/numeracy. Seasonal workers are Pacific-sourced	Range of backgrounds and qualifications	Range of backgrounds and qualifications
Learning plan	NCs L1–4 advanced. Compulsory training. Originally one year time limit to complete; now no time limit	Compulsory NC Tourism L3 (+ induction, health & safety modules). ILP re-evaluated annually. B.Applied Mgmt. No re-employment without NC completion	2-week induction and training towards Lifeguard Award
Training times & locations	OTJ just-in-time	OTJ 1 hr/fortnight for new; 3 hrs/fortnight leadership	OTJ structured programme
Assessment approach	Roving assessor	WPB assessor	WPB assessor

Abbreviations used: WPB (workplace-based) OTJ (on the job) NC (National Certificate) NCEA (National Certificate of Educational Achievement) ITO (Industry Training Organisation) L1–4 (Levels 1 to 4)

#### 4. The tourism provider

The Mount Victoria Skifield is one of a number of skifields owned by Snow Time whose shareholding is largely made up of other local tourism operators. Aside from a small number of permanent infrastructure personnel, the workforce is seasonal and re-hired each snow season. At its peak the skifield has upwards of 600 people in its employment. Snow Time is in strong competition with other skifield and tourism operators to attract people (primarily from Australia) for skiing holidays to their skifields. Because of this strong competition, the company wishes to offer visitors to the skifield a “world-class snow experience” so that they will return and encourage others to visit. In addition to enjoying great facilities, the ability of visitors to have this world-class snow experience very much rests upon the service they receive from skifield staff. Workplace learning at the skifield is thus oriented towards aligning all staff (particularly those less-skilled staff) with the service-oriented values of the company and reflecting these values in the quality of their work.

#### 5. The vineyard

Fine Wine Company provides grapes for winemaking to a particular wine brand. It is one of many vineyards around New Zealand owned by a company which is itself a subsidiary of a large corporate entity with holding companies and beverage brands around the world. While the New Zealand company that owns Fine Wine Company and other vineyards has a central executive team, it takes a somewhat more decentralised approach to the vineyards themselves. Each vineyard, including Fine Wine Company, operates with a manager, trainer and staff to produce grapes for different wine brands and the corporate structure allows them to focus on delivery to specific winemakers.

#### 6. The swimming pool

Splash Garden provides a range of public swimming services and related facilities such as pools, swimming lessons, sauna, cafe, childcare and fitness centre. It is one of a group of leisure centres that are owned by a business unit within a city council. There is a commitment to being accessible to the community by ensuring free pool access, and other services (e.g. swimming lessons) which are relevant, affordable and attuned to customers.

### The structure of this report

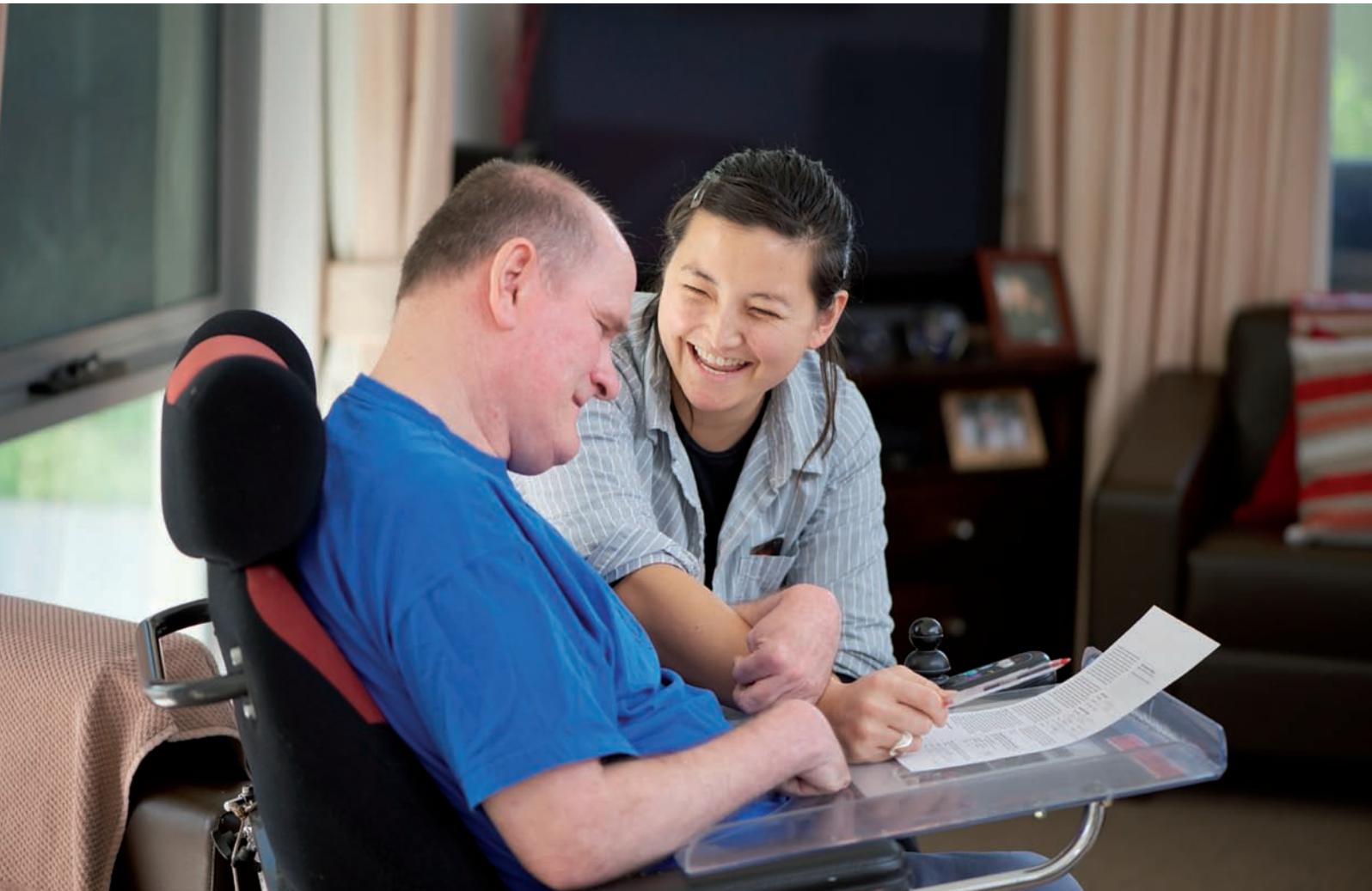
In view of workplace learning and industry training's lesser-known and less-esteemed status in the tertiary education sector, we hope that the findings from this research will increase awareness of good teaching and learning practices outside of the traditional educational institutions. In doing so the research raise questions about some common ideas about education—for example, that the best education is institutionally-based, that more learning is automatically better and that the most important learning is independent of context and universal. We also hope that these findings contribute to the improvement of teaching and learning in workplaces and to more sophisticated understandings of imperatives, opportunities and limitations in workplace learning.

The second section, *Studying learning and success in the workplace*, explores the key ideas behind our approach to studying “successful workplace learning” and “how learning happens at work”. We look at the theories that underpin and guide our approach, namely a conceptualisation of learning as participation and of success in workplace learning as encompassing a range of possibilities from a range of perspectives.

The third section, *How learning happens at work*, analyses the dimensions of teaching and learning across our six participating workplaces. Based on our case studies, we extract and analyse key organisational structures and policies, mechanisms for learner support, and formal and experience-based teaching approaches, including mentoring. We suggest thinking of these dimensions as key principles for the processes, procedures and practices that contribute to successful workplace learning in a way that still allows individual workplaces to adapt to their own specific industry contexts, trainees and business aims.

The fourth and final section, *Implications for tertiary stakeholders*, discusses the ways in which our findings can be useful for tertiary funders, providers, brokers and learners. We highlight in particular the need to understand the important interplay between workplace structures and practices, the critical role of the trainer and that learning is about participating—both in the workplace and in life.

We provide six *case studies* which contain accounts of each of the six workplaces we studied. Each account is a “story” about each workplace. We discuss the way that learning is structured in the organisation, and we explore the perspectives of the learners, experienced workers, trainers, employers, mentors and training managers whom we interviewed.



## Studying learning and success in the workplace

The decision to take a case study approach, with interviewing and observation methods, was informed by our understandings of two important concepts in the project: learning and success. These understandings and their implications for the design and findings of this study are explored in this section. This section is therefore not just “the technical bit”, nor written only for other researchers to read. Rather it spells out our understanding of workplace learning and its opportunities and limitations, and is written for an audience of tertiary stakeholders (in particular tertiary providers, policy managers and analysts, and industry representatives).

### What is learning and how can we study it in the workplace?

#### Learning as acquisition

Studying “how learning happens at work” means having some idea of what learning actually is, as well as how it actually occurs. A conceptualisation of learning is by no means a given. One of the most accepted and broad views of learning is that it involves “any process that in living organisms leads to permanent capacity changes and which is not solely due to biological maturation or aging” (Illeris, 2009, p. 7). One way to move this very broad definition towards something more concrete (that we can research) is to consider Sfard’s (1998) useful conceptualisation of the two major views of learning and learning processes as metaphors: learning as *acquisition* and learning as *participation*.

The first view of learning—as acquisition—dominates our educational institutions and many other formal learning contexts. There is an assumption that knowledge is something that exists independently of the knower, but which “the knower can acquire, internalise, own and exhibit” (Sfard, 1998, p. 5). Put crudely, the learner is positioned as the object to be taught; the teacher simply deposits the knowledge into their brain—hence the numerous progressive and radical education critiques of this approach, most famously by Freire (1972) as “banking education”.

This approach of treating learning in terms of “an individual mind being steadily stocked with ideas” (Hager, 2004, p. 243), by elevating the mind over the body makes learning an *individual* activity. Mental life in this approach is considered as “interior” to persons, with learning perceived to involve “a change in the contents of an individual mind” (Hager, 2004, p. 246). This perception also *privileges* the mind over the body, since thinking (what minds do) is emphasised over action in the world (what bodies do) (Felstead, Gallie, & Green, 2004, p. 6). It implies that the learner is “gaining ownership of a self-contained body of material” that is explicit as facts, schemas, materials, concepts, notions, frameworks and so on (Felstead et al., 2004). This further implies that the learner can articulate what he/she has learned and that there is a stock of knowledge “out there”.

With a learning-as-acquisition model, it is of course impossible to “see” learning or any of the actual processes involved since they are inside the individual’s head. Instead, people refer to a set of accepted proxies for learning such as use of qualifications as a proxy measure for skills, and use of surveys which depict (and measure) learning only in terms of formal episodes of training—both of which also hold “greatest sway over policy thinking” (Felstead et al., 2009, p. 4). If we accepted this view of learning, we would have to make the individual learner our principal unit of analysis (not the workplace) and judge the success of the workplace learning on whether the individual had learned what was taught. We might logically then use a survey method to measure some of the proxies of formal learning such as qualifications completion.<sup>6</sup>

However, we know that learning is not simply a matter of storing knowledge from “out there”. Something more goes on *inside* people’s heads and something more happens *outside* their heads too. Neuroscience and education theory have provided compelling evidence that learning is an inherent human capacity and that we are all hard-wired to learn. They have also shown that there are individual cognitive differences in the way each of us makes sense of information and that these can also be related to situational cues (see, for example, Claxton, 2002; Sawyer, 2008). Students in the same classroom frequently learn different things or receive different knowledge, even though they sat together in the same classroom, reading the same textbooks and listening to the same teacher saying the same thing to all of them at once. Furthermore, knowledge does not always accrue to the individual; it can be distributed across networks (e.g. central business with remote branches) and it can involve cooperative learning (Cullen et al., 2002).

This points us towards understanding knowledge as “fluid, that is, produced and continually reconstructed through the relationships and interactions between individuals, rather than as an object which is acquired, internalised and owned” (Lee et al., 2004, p. 6). It includes the possibility that learning might involve the body as well as the mind and therefore context becomes important. From this perspective of knowledge learning is seen as involving action and participation; as stimulated through social interaction. Importantly, learning now becomes *situated*, and in Sfard’s (1998) terms, this leads us to what we think is the most useful metaphor for researching workplace learning: the metaphor of learning as participation.

6. The Ministry of Education has already compiled and analysed statistics on qualifications completion: see, for instance, Mahoney (2010a, 2010b).

### Learning as participation

If learning is not just something that individuals do and not something that we can assume will happen just because somebody says they taught it, then we need a different kind of model for learning. The learning-as-participation metaphor takes the view that learning is social, with individual elements, rather than solely individual, and that learning comes from experiencing, and participating in, daily life—in this case, participating in the relations, content and context of work.

Within the perspective of learning as participation, Lave and Wenger's (1991) concepts of "legitimate peripheral participation" and "communities of practice" have enjoyed widespread currency within workplace learning theory and research as accounts of the ways that people learn through participation. As Wenger writes:

**Participation here refers not just to local events of engagement in certain activities with certain people, but to a more encompassing process of being active participants in the *practices* of social communities and constructing *identities* in relation to these communities. Participating in a playground clique or in a work team, for instance, is both a kind of action and a form of belonging. Such participation shapes not only what we do, but also who we are and how we interpret what we do. (Wenger, 1998, p. 4)**

It is through legitimate peripheral participation that such shaping occurs. The learning processes for learners take place through the relations of newcomers and old-timers within communities of practice. Based on case studies of apprenticeships, Lave and Wenger (1991) demonstrate how, through this relational structure, the novice as a newcomer moves towards becoming a fully-fledged member of the community and towards full participation and expert status. This is achieved not only by learning particular task-related skills, but also by learning how to "be" an appropriate and therefore legitimate member of that community. A good example of this would be an apprentice builder learning to become a qualified and respected builder, and member of the building and construction industry and community.

The idea of learning encompassing membership in a community of practice is not without some limitations. One broad criticism is that the communities of practice examined by Lave and Wenger (1991) to illustrate and support their theory are not representative of most contemporary workplaces and work organisations (Rainbird, Munro, & Holly, 2001). They also may not account for learning in the sense of continued learning or professional development. For example, there is no explanation of how old-timer employees who have achieved full participation may be continuing to learn. No account is taken of the role of "teaching", the role of formal education in the workplace and how apprentices may share skills and knowledge with others. No account is taken of prior learning and how learner identities are therefore also constructed through social relationships and processes outside a particular community of practice. There are also issues of power which are acknowledged but not investigated (Fuller, Hodkinson, Hodkinson,

& Unwin, 2005, pp. 52–54). Lave and Wenger's (1991) approach may also obscure or direct our attention away from studying the intricacies of workplace relationships that have a direct impact on learning. For example, opportunities to learn can be highly contestable due to competition between newcomers and old-timers, full-time and part-time or contract workers, teams with different roles and esteem, individual workers' goals and careers, and institutions or groups representing different groups of workers (Billett, 2001b). Perhaps somewhat counter-intuitively, knowledge-rich organisations such as hospitals may frame the use of knowledge in ways that actually bar newcomers from growing participation in communities of practice and actually decrease their learning (Hughes, Moore, & Bailey, 1999). We can routinely observe this situation in television hospital dramas such as *Grey's Anatomy*, where surgical interns face intense pressure to quickly accumulate knowledge and hours of medical practice while simultaneously being subjected to a seemingly impenetrable hierarchy that rations, and sets up competition for, learning opportunities.

Nevertheless, the broadening of the learning concept to be one of *situatedness* is critical. From the point of view of the research, it means that the research focus, or unit of analysis, is the workplace—the tools and artefacts used, the relationships between people—and not just the individual learner. Hence we observed learners and learning in context wherever possible, and we interviewed a range of people in each workplace, not only the learners.

### What is *successful* workplace learning and how would we know?

Having considered the most useful stance on learning, we have also considered how to interpret our brief for the research to study *successful* workplace learning. Our early research design work—reviewing our own expertise in teaching/learning and workplace learning, reviewing the initial literature review for this study (Harris et al., 2009), and holding discussions with ITOs and the ITF—meant recognising that there are multiple understandings of "success". In fact our initial workshop with ITOs was not designed so that we would all reach the same *single* understanding of "success" but so that we could reach what might be a set of shared understandings about it. We wanted to ensure that we allowed for a range of possible success criteria in our sampling and that we could capture different viewpoints of success through our fieldwork. Hence discussions with ITOs ranged across easily measurable success markers like employee retention and completion of qualifications to less obvious markers like employee confidence and increased participation across the organisation, improved workplace climate and employer contribution to industry development.

The idea that there might be different, or even competing, ideas of success is not surprising given the range of views about what learning is and how it occurs. It is also not surprising given the range of different meanings given to, and purposes for, "workplace learning". These purposes in particular affect meanings of success for different people and groups in this research project.

## Studying learning and success in the workplace

The most straightforward definition of workplace learning refers to learning that occurs in a workplace (as opposed to occurring in an educational institution). This emphasises the workplace as a location or site for training that is more convenient and more authentic (giving access to the real tools, conditions and situations) than any other site. Other, more complex views focus on the way that learning with “a curriculum driven by the exigencies of work” (Costley & Armsby, 2007, p. 26) is inextricably bound up with changes in the way the *nature* of knowledge is now understood (so not just its content but its functioning and effects) and the nature of the world of work. In other words, workplace learning implies more than a narrow focus on surface-level skills or competencies needed right now (Winch & Ingram, 2002). It is about creating organisational processes and cultures in order to adapt to a future that is uncertain, both for organisations (changing markets, new skill demands) and for the individuals who work for them (diminished income and status). Some perspectives therefore also explore the way that workplace learning might also challenge the dominance of 20th century models of institutionalised education and its antagonistic relationship with the world of work (Vaughan, 2008).

The different meanings of workplace learning are usually related to the different views about workplace learning’s purposes (what is it for?), participants (who is it for?) and desired outcomes (what would successful workplace learning be like?). Lee et al. (2004) suggest that perspective differences on workplace learning mean it can be understood in quite different ways. It can be seen as something that the owners/managers of

firms can use to ensure workers have the appropriate skills for production. It can be seen as something that the workers can access so they can move beyond developing their skills in production and value in the labour market, to developing their capability as citizens in the wider society. It can also be seen as something of benefit for the state whose agencies may have a number of competing interests and increasing their values, which range from developing the infrastructure for “internationally competitive” domestic production to achieving equity outcomes in society.

Different perspectives on purpose, desired outcomes and the interests that should be served make for very different understandings of workplace learning—which have led to “shifting definitions and understandings of workplace learning” (Lee et al., 2004, p. 5) with some people across disciplines employing “different terminology to describe the same phenomenon” or employing “the same terminology when meaning something quite different”.

In our project design we have taken account of these different meanings in several ways. Firstly we recognise that different perspectives exist and have posited the idea that *successful* workplace learning somehow accommodates a range of different and competing perspectives on workplace learning by those involved. Our design has attempted to include different perspectives on success—Success for whom? In what way or with what markers? And to what ends?—through analysis of the interview and observational material.



## Studying learning and success in the workplace

We recognised that while ITOs were inherently interested in trainee enrolments and qualification completions because of their funding basis, that success was also likely to be about qualifications keeping step with industry development. By virtue of being advised by the ITOs, which are funded to facilitate formal learning towards nationally-recognised qualifications, we had a sampling process that privileged workplaces that were successful in credentialing their employees. This is a widely accepted and obvious (though not sufficient) proxy for learning and an accepted indicator of success. This is underlined by recent publications by the Ministry of Education which analyse and compare qualification completions (not just enrolments) across different ITOs and between ITOs and other tertiary organisations (Mahoney, 2009b, 2010a, 2010b).

However, employers or individual workers or different groups of workers might have more nuanced ideas about success. We considered, for example, that workers might see success in terms of recognition of their skills or value to the business and that this might not always correspond with qualifications completion. Success might manifest in terms of their standing among peers as much as through formal qualifications, or the formal qualifications might be a proxy for an invigorated attitude towards work or new confidence. Workplaces might recognise success by giving greater autonomy to workers. While “success” for employers might be completion of qualifications, that might really be a proxy for developing greater excellence in products and services—perhaps manifest in customer complaint/praise statistics, employee retention and employee contribution to innovative practices and processes.

Following this range of possibilities for “success”, and a learning as participation view of learning, our project design takes account of Wenger’s (1998, p. 5) four points of learning in workplace contexts: community (learning as belonging); practice (learning as doing); identity (learning as becoming); and meaning (learning as experience). For this reason we interviewed a range

of people in each workplace and tried to capture the many interrelations of workplace learning that Nielsen and Kvale (2005) emphasise as:

- learning from above (where the master/expert is a role model and responsible for the learner, though they are often inaccessible or away or invisible)
- learning from the person next to you or neighbour learning (involving experienced workers)
- learning from below (where experienced workers may learn from the inexperienced workers)
- learning from the outside (where workers might create “moonlight communities” with workers in other businesses to supplement their workplace learning).

Thus the people we interviewed included those who were involved as current learners/trainees and teachers/trainers, but also those who were involved as employers setting the overall framework for training programmes, training managers setting the conditions and overseeing training programmes, and official or unofficial mentors who had completed training or reached experienced worker status and supported newer or less-experienced workers.

Our interview schedules comprised a set of core interview questions for everyone plus additional sets of questions targeting each person’s particular role and soliciting their particular perspective on their current and prior learning experiences and what had been successful for them personally, the business and/or the industry. In some cases people’s roles overlapped—for example, a business owner might also be a manager and a trainer or a manager might also be a trainee. We were able to take account of these multiple roles with our lines of questioning and we consider the implications—potential opportunities or limitations—arising from their multiple roles throughout the rest of the report.



## How learning happens at work

### Principles and processes across workplaces

As a result of this research, we now know more about what happens when people are learning at work. There is no one model but there are common principles involved in the approaches of different workplaces. We have observed similar kinds of processes going on, as well as their unique adaptations to different circumstances, work conditions, workforces and business models.

From the six workplace “landscapes of learning” (detailed in the appendices of this report), we have generated an account of the overall dimensions of how (successful) learning happens at work.

### Support at the organisational level

In this subsection, we look at the ways the workplaces in this study provided good organisational support for workplace learning. These included organisational policies and structures, provision of high-quality resources and recognition of achievements in learning.

### Prioritising learning through organisational policies and structures

At all six workplaces, the companies’ commitment to learning were reflected in their organisational structures and roles. They emphasised their commitment by having a designated person with the interest, dedication and authority to promote workplace learning. In some cases the companies had outstanding learning leaders with a deep personal and professional commitment to their own and others’ learning. Provision for this position, along with the resources to carry it out, highlighted preparedness to “walk the talk” in relation to workplace learning. For example, the homecare provider had a minimum in-house orientation programme for all new workers but aimed to enter into Training Agreements for formal training towards qualifications with all its workers. As a result, 73 percent of care workers and case managers had at least a Level 2 qualification; the ultimate goal is 90 percent with qualifications. Case managers were supported to complete Level 5 in Disability Support through the ITO, Careerforce, and four were doing Level 7 qualifications with the University of Auckland. Administration staff were able to access short courses as required, although the training manager would like to broaden opportunities for them as well.

The criteria for accessing training at the homecare facility were described as “light”—as long as workers’ literacy skills (assessed on entry) were high enough for them to meaningfully engage with the course and they had been employed for three months, and had worked a reasonable number of hours per week (e.g. not part-time workers), Homecare Inc. was prepared to enter a Training Agreement with them.

Workers had the choice of undertaking the learning (participating in class-based activities) towards their qualifications during the week

in work time or weekend during their own time. They were paid for their attendance in classes either way. All materials were supplied and learners’ fees were paid. For employees who did not have a quiet place to study at home, Homecare Inc. provided a quiet room onsite where they could work. Buddies and support groups were also organised so that those who wanted to could work together on the workbooks.

Training managers at Homecare Inc. had responsibility for ensuring that learners were part of a learning infrastructure where they could thrive. The homecare provider’s trainer had the official role of staff development/quality leader which included responsibility for recruitment, induction, staff development and the training programme. The breadth of this role across the entire learning process for workers, and at both planning and operational levels, gave her a deep understanding of learner, as well as client needs, and how to meet them through programme design. Her role was supported by a service manager who oversaw the training programme in terms of service delivery contracts. The service manager also modelled the organisation’s commitment to learning by undertaking the same training programme that new and largely unconfident learners were being encouraged to undertake.

The training manager at the vineyard also demonstrated his and the company’s commitment to learning. He supported learners by making his own learning visible as part of everyday work practice. He involved workers in collective resource development, and in critiquing and contributing to publications by outside agencies. He invited machinery dealers to visit his and other worksites where he, as well as other workers, could ask questions and try things out. He read the product manuals for new equipment and included new information or modifications in training materials so that resources were relevant and up to date. These behaviours demonstrated to others in the workplace that learning was something that everybody did, and that it was an ongoing and integral part of work.

Similarly, the employer at Boeing Builders invited product representatives onsite to give advice and demonstrations, where he would ask questions to model this learning approach for his apprentices. He also tried to develop a reflective orientation to practice by encouraging metacognitive practices such as “stop, think and ask” before cutting. While other carpenters had responsibility for much of the actual day-to-day teaching, the employer oversaw the training programme and encouraged everyone to make links between their work quality and client satisfaction by reminding them: “The general rule is: would it be good enough for your own house?” His commitment to quality of outcomes and learning support translated into an organisation limit on the number of new apprentices at any one time. The landscaper also staggered his employment of apprentices. For these employers, just as learning is only as good as the opportunities to practise, use and develop it, apprenticeships are only as good as the ability of the business to support them.

## How learning happens at work

### Providing quality resources

All of the workplaces provided learners with workbooks and guides. Some used DVDs illustrating models of good practice. The vineyard supported practical demonstrations by providing learners with Standard Operating Procedure (SOP) manuals for equipment used at the vineyard. Notably, although instruction manuals from the equipment manufacturers were available, site-specific manuals were produced especially for the novice learners. The SOP manuals were created by the training manager who tested the equipment first-hand and then, with input from some of the experienced workers, adapted instructions, added diagrams and created learner-specific content (e.g. questions to consider and short tests). The manuals were also aligned with Horticulture ITO-designed unit standards and served as an assessment tool for the workplace-based assessors. The training manager had also created a driving course so that learners could learn and apply their practical skills with quad bikes and related equipment.

The homecare provider had a similar approach. The trainer used and adapted ITO-provided materials and issued a workbook to each learner. These workbooks could be used by groups of learners working together in class, as well as taken home and re-read by individual learners. We observed the trainer carefully explaining where the workbooks had been adapted and why some new pages had been inserted that were specific to their company's protocols. The trainer also made use of the actual materials that workers used in their daily work. We observed a class module on hygiene that encouraged learners to practise taking protective gloves on and off and to use a particular soap dispenser. These "artefacts" were interspersed with trainer instructions and class discussions on the principles of their usage. Thus learners were able to develop both a theoretical and literal hands-on understanding of the "tools of their trade" and the situations in which they could be used.

The most well-designed training materials were clear and inviting. They used plain English and had helpful charts and diagrams. The level of text difficulty was such that most readers would be able to read and comprehend the materials without the need for someone to help them to navigate the text. The resources were therefore likely to be well-pitched at the levels of most learners, which made independent learning feasible.

One of the most important resources provided to learners was time. When learning was kept at the forefront of an organisation's mission, the times when learning was interrupted to meet other (work) demands were kept to a minimum. In other words, learning was not routinely pushed aside when other things appeared to be more important; instead, learning was prioritised.

### Creating mechanisms to recognise learning success

Most of the workplaces had clear mechanisms by which the success of their learners could be recognised and rewarded. The homecare provider had the most visible system with a graduation ceremony for each cohort of learners. We observed framed photographs from different graduations around the training room—a public acknowledgement of the commitment

of those learners and the organisation, and encouragement to new groups of learners.

The swimming pool used a class or group format for the learning programme, where learners could support and encourage each other. Recognition for learning efforts occurred during teaching, with the trainer noticing and commenting on group efforts in particular. Public recognition for individuals occurred as people completed their lifeguard qualification and were formally inducted as a lifeguard into one of the worksites in the organisation.

The building and landscaping employers also recognised their learners' increasing competence by increasing apprentices' responsibilities at work. As apprentices learned more, these employers also invited them to contribute to work planning discussions, taking them beyond carrying out designated tasks to helping identify what those tasks should be, and when and how they should be undertaken. In addition, the builder employer was involved with Apprentice of the Year competitions—a nationally recognised awards system. He saw this as another important way to recognise success, both for the selected apprentices in the competition and for his own apprentices who would learn about becoming a highly successful apprentice and builder.

The tourism provider's recognition of success was built into individual work contracts. As one learner there told us:

**One of the things that helps you become an experienced worker at Snow Time is a system called 'Snow Starts'—a recognition system that you can be nominated for once a month, in different categories such as customer service and leadership.**

In some cases, training programmes were linked to career pathways. The homecare provider encouraged workers to complete qualifications, demonstrate capability and take responsibility for their own learning (perhaps by developing particular new skills; e.g. computer literacy) as part of preparing for promotion application. The usual career progression is from homecare worker, to careworker and buddy (to new careworkers) and then case manager. Although some careworkers we interviewed were not seeking promotion (often because they wanted to retain the regular, hands-on contact with clients), they very much appreciated having promotion and development opportunities.

For many of the workers we talked with, the most important recognition was informal—usually being told by their employers and managers that they were appreciated and their efforts valued. Simple acknowledgements such as morning teas and occasional private "thank yous" appeared to have a big impact on morale and worker persistence in learning.

### Structuring orientation to the job

The early days in a workplace convey the expectations of the workplace, the support that will be provided and set the scene for the type of employee that the new worker will become. Five of the six workplaces had structured workplace orientation plans or planned induction processes for new workers/learners. The complexity of the workplace

and its workplace demands determined how structured this needed to be. Workplaces that involved new workers taking responsibility or care for others tended to have a very specific orientation, whereas companies that worked with machines or equipment focused on basic health and safety first. Apprentices were assisted to understand their Training Agreements and to develop a sense of how their apprenticeship would work in terms of roles, responsibilities and time frames.

All six workplaces ensured successful entry here. They did not just “drop” people into their new roles; they provided a transition period where new workers were given both the time to settle in and the guidance they needed to make a good start. Critically, new learners felt clear about the processes involved in starting work and learning. They knew who to ask questions of, when they needed to ask them and they felt encouraged to go ahead and ask. As one trainer at the vineyard expressed it, “The only silly question is the one that you don’t ask”.

Learners frequently told us that they felt as though they were introduced to a “family” of supportive members who cared about each other and who were focused on helping everyone to be successful in their learning and work. It is the mix of supportive factors that weave together to build a strong workplace learning culture. A case manager described how she had been supported in her study by the excellent training materials; by the way her workplace encouraged and supported learning, and by the commitment of her co-workers to provide any assistance needed for her to feel that she is doing a good job. As she is comparatively young she has had to work on her people skills. “I have had to learn how to listen to people properly. For example, in dealing with a complaint, I want to feel that when I put the phone down, I have completed the task properly”. She was nervous when she faced her first complaint, and a senior colleague modelled how to handle the complaint while she observed. Now when she has a complaint she always talks about it with this colleague about how best to approach it. “Here there is always backup. Someone is always behind you”. (Case manager, Homecare Inc.)

Part of the total support structure that helped her was getting the workbooks in advance so that it was possible to see the shape of the work overall. She also had other colleagues doing the same work, so she experienced learning as a group and had access to dictionaries and other material (such as Treaty of Waitangi information). She particularly appreciated the way that training was set up so that she could focus on the learning—training was paid, delivered in the workplace and fitted in with her work commitments. Being able to practise the skills in the workplace also reinforced her learning.

### Using good teaching strategies to support structured learning activities

While all of the workplaces had a clear idea of the skills that they wanted their learners to develop, they did not approach workplace learning the same way. Homecare Inc., Snow Time and Splash Garden all had formal training for their workers. These workplaces began with formal learning in classes, with a trainer working through essential understandings with groups of learners. Initial essential learning began before work with clients, and continued towards industry-relevant qualifications either before or during employment.

The other three workplaces taught the knowledge as opportunities arose—learning was integral to the work and was akin to the more typical master–novice model, where the novice begins by observing and listening, is given small tasks and gradually moves on to more complex and bigger tasks. The first approach could be termed “formal group teaching”, and the second as “learning from structured experience”.

Both approaches also used a combination of structured teaching and workplace practice, which allowed learners to gain competency that could be adjusted to suit their particular needs and as different work situations arose. This combination helped provide a set of experiences that were both long enough to provide a *repertoire* of experiences to ensure the learning covered the scope of the activities to be practised in the workplace, and that learners had opportunities to practise what they were learning in circumstances *other* than where they acquired the skills (Choy, Bowman, Billett, Wignall, & Haukka, 2008).

### Formal group teaching

We were able to observe formal group teaching at Homecare Inc., Splash Garden and Snow Time. The training at Homecare Inc. was held for careworkers over several hours during the weekend when they were not working with clients. The training at the pool was part of a three-week full-time programme before the learners were employed as lifeguards. At Snow Time, there was a full week of formal induction in the week prior to the opening of the skifield for the season, together with formal training for an hour after work on designated days.

The tutors demonstrated sound teaching approaches in two of the teaching sessions that we observed. These approaches were built on the deep knowledge that tutors had of what they were teaching (content knowledge). When someone has an in-depth content knowledge they are able to determine what it is that learners need to know and be able to do to become competent, and they can integrate this knowledge into their teaching in ways that help learning. This knowledge also helps them to convey their enthusiasm, and connect their teaching to the “real world”.

While tutors had strong content knowledge, only one had formal teaching qualifications (a Certificate in Adult Education). Tutors explained that they had learned their teaching approaches from previous more formally qualified tutors, a good example of how learning can become embedded within a workplace. Tutors also had opportunities to further develop their own professional teaching knowledge by connecting with other tutors. We observed the following examples of teaching approaches that were likely to support meaningful learning.

### Clear expectations and processes

- The learning space was well set up, with tables, whiteboards and resources.
- The lesson purposes and learning intentions were written on a whiteboard at the front of the room and these were introduced at the beginning of the session, referred to throughout the session and revisited at the end.
- Tutors conveyed high expectations for the learners in terms of the importance of their work and learning as well as the expectation that

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they would be successful. This contributed to conveying the norms of the learning community that learners would be joining.

- Tutors showed how learning activities related to summative assessment.

### Learner-learner and learner-tutor interaction

- Tutors had an “invitational” approach to learning—welcoming participants individually by name and showing an interest in their lives beyond the classroom. This enabled them to build a meaningful social connection with individuals.
- A productive peer-learning culture was evident with varied opportunities for joint problem-solving, and co-operative learning.
- Tutors provided feedback during learning activities.
- Tutors and learners collectively built a glossary of important vocabulary required to meet the learning outcomes.
- The tutors asked the group about their previous session or homework, how they found it and aspects that were difficult or needed clarification. This practice contributed to building meaningful social connections with the group of learners.

### “Real” learning

- The teaching involved activating the participants’ current knowledge and linking this knowledge to the new learning. For example, when a tutor was beginning a unit standard on hazards in the workplace she asked caregivers to recall hazards that they had encountered in a client’s home and what they had done about it.
- Learning was highly relevant to the participants and their work.
- There was a focus on developing learners’ understanding rather than simply “covering” the material. The tutors continually checked and reinforced understanding.
- “Why” and “what if” scenarios were used with learners—see Homecare Inc., Boeing, Splash Garden, Fine Wine.

We did not observe any summative assessment “events”, but tutors were responsible for assessment of unit standards, both in written work and practical assessments. This involved keeping good records, and encouraging learners and employers so they knew where they were at in terms of gaining their qualifications.

Not everything we observed involved successful teaching and meaningful learning. In one workplace we observed the tutor in “transmission mode”, with minimal learner interaction. Learners spent their time completing the written requirements for a three-credit unit standard, after which time the learners were congratulated for “passing” the standard.

### Learning from experience

In all workplaces people learn while engaged in their work. Some workplaces were specifically organised so that work was visible, talked about and “unpacked” for novices. Vygotsky (1978) first introduced the concept of the “zone of proximal development” for learning. Learning from and with others happens best in this zone, where tasks are neither too easy for the learner (this leads to boredom) nor beyond their capabilities (this leads to frustration). Within the zone of proximal development, learners are given the support they need to accomplish tasks that they could not do on their own. This support is called scaffolding. The expert,

when scaffolding the learning of a less-experienced person, judges when it is the right time to start dismantling the scaffolding, leaving some of the task for the learner to accomplish on their own. As the learner demonstrates their increased capability over time the expert progressively removes their scaffolded support until the novice can handle the whole task independently.

During the scaffolded learning, the expert provides formative feedback and guidance and when the learner is independently able to achieve the task or activity they are summatively assessed. The role of the expert in assisting novices to learn from experience is as important as that of the tutor in a more formal teaching context. The expert practitioner also has to have a deep content knowledge of the work so that they can guide learners in acquiring the essential knowledge and skills required for successful learning.

Helping people learn from experience requires specific mentoring skills. At its broadest, mentoring in the workplace is simply a person-to-person form of informal support for the learner. Helping others learn can occur “naturally” between workers, but is more likely to become integral to workplace learning when the workplace climate tangibly supports learning and promotes supportive relationships between workers.

Formal mentoring is a structured version of guided learning at work and is associated particularly with enculturation, employee retention, learning tacit knowledge (the “tricks of the trade”) and fostering the move from peripheral to full participation in communities of practice. It is particularly important to employers who consider that good workplace performance requires more than the completion of qualifications. In addition to completion of qualifications each workplace had its own approach to “how we do things around here” and formal and informal mentoring was used to support new workers to gain access to this knowledge.

The definition of mentoring that we use is:

**Mentoring relationships are: dynamic, reciprocal, personal relationships in which a more experienced person acts as a guide, role model, teacher and sponsor of a less experienced person. Mentors provide protégés with knowledge, advice, counsel, support and opportunity in the protégé’s pursuit of full membership in a particular profession. (Johnson & Ridley, 2004, p. xv)**

Features of effective mentoring have been well researched in the literature. Mentoring has been most commonly associated (and researched) with certain groups such as beginning teachers (where it is strongly associated with retention issues; see for example, Parker, Ndoye, & Imig, 2009), and people engaged in professional career development such as those in professional or managerial work. For example, beginning teachers in New Zealand primary and secondary schools have a reduced teaching load to enable them to engage in a formal mentoring programme for their first two years of teaching (Cameron, 2007). These programmes involve distributed mentoring from key staff members as well as a designated mentor, a planned and structured learning programme to meet specific registration requirements and individual

goals, observation and appraisal of teaching, opportunities to observe the work of other teachers, and formal professional learning opportunities. Effective mentoring has been shown to influence both teaching quality and retention in the profession, and to shape teacher commitment to developing their practice, their work with colleagues and others and their attitudes to the importance of ongoing learning.

More recently, mentoring has been used for young people in employability skills training programmes (see examples in Eddy Adams Consultants Ltd & Smart Consultancy (Scotland) Ltd, 2007) or entering the workplace as employees for the first time and grappling with new identities, responsibilities and expectations of their behaviour as adults and workers. Although mentoring occurs in apprenticeships, it is so embedded in the process that it has tended to be recognised and discussed in terms of an expert–novice or master–student relationship.

Mentoring is commonly long-term but forms of it may be short-term, and it may be formal or informal. In its long-term form, mentoring commonly follows a pattern of initiation (up to one year), cultivation (two to five years), separation (six months to two years) and redefinition (as peers) (Ragins & Kram, 2007, as cited in Holland, 2009). In its short-term form, it commonly serves as part of an induction or orientation process until the new worker is “up to speed”. Informal forms of mentoring and support may continue after this. Hence models of mentoring may range from the “functionalist” ones focused on transmitting information and specific learning outcomes, through to “relational” ones focused on learning as a “reconfiguration of existing aspects of personal identity, knowledge and skills” (Falk, 2002, as cited in Holland, 2009, p. 22).

Regardless of whether a mentor has a short – or long-term learning relationship with a novice there are some core mentoring practices that support successful learning. People we interviewed told us about mentoring practices and skills that, for us, highlight the importance of making time for mentoring and seeing it as part of the job rather than something designed to get people to just get on with the job. Interviewees also highlighted the way that several people might mentor a novice and the need for these mentors to provide consistent expectations and similar models of practice. This was more likely to occur when the culture of the workplace supported joint responsibility for people’s learning and when people talked to each other about how and why they did things. We also learned from interviewees how important careful selection of mentors was. People selected for this role need to have the following range of skills and personal attributes:

- ability to relate well to learners and build their trust and confidence
- ability to model their own expertise in practice and talk about it meaningfully
- sensitivity to the novice’s level of capability and ability to match expectations and activities to this level
- skills in observing practice and providing helpful guidance
- ability to ask questions that raise awareness, explore novice beliefs, predict consequences and explore solutions to problems
- ability to allow novices space to learn for themselves when stakes are not too high
- ability to encourage novices to “think aloud” and explain their

decisions

- knowledge of qualification requirements and ability to relate guidance and practice to these (e.g. completion of course workbooks, tracking progress).

Each of the six workplaces used different forms of mentoring to support learners and new workers. The most formalised and ongoing form of mentoring occurred in the workplaces with a history of successful apprenticeship completion. At Boeing Builders and Dig This, the employer was also the trainer and operated in the expert role, guiding the apprentices’ learning and inducting them into the community of practice in the industry. In both cases mentoring was extended to other members in the community of practice. At Boeing Builders, the employer asked an experienced worker (who had completed an apprenticeship) to supervise a newer apprentice. Mentors encouraged their apprentices to try out techniques and tasks and then report back to employers on their progress, challenges, questions and learning. At Dig This, the employer used a form of “brokered” mentoring by sending apprentices to courses where they could meet other apprentices from other workplaces, so his apprentices would gain a sense of themselves and their work in relation to the industry (community) as a whole.

In both of these workplaces, the employer fostered high-quality mentoring by ensuring that there was sufficient time provided for the mentoring to occur and that the mentoring workload was sustainable. Each employer took on one new apprentice at a time, when current apprentices were close to completion and required less mentoring themselves. The almost-qualified apprentices were introduced to mentoring by first taking on a minor mentoring role with the new apprentice. This can be an excellent way of utilising the strengths of peer support within a workplace, a practice that has been shown to benefit the peer supporter as well as the novice learner (Cameron, 2002). Quite simply it helps someone develop their own skills when they have to explain, and perhaps justify, what they are doing and why they are doing it to someone else. In a study of a company in the construction industry, this kind of mentoring was particularly useful at the early career stage because it fostered a process of “action, reflection, and live experimentation” (Karallis & Sandelands, 2009).

Several of the workplaces recognised this potential for harnessing the naturally-occurring resources that people working together can offer one another. We saw that at Homecare Inc. new workers were initially paired or “buddied” with an experienced worker for three days, and accompanied the experienced worker on visits to clients. This provided an opportunity for the experienced worker to articulate what they were doing and why, and share insights into their roles with clients, as well as introduce new workers to expected workplace practices. At Snow Time, senior workers were enlisted as buddies to guide the new workers after their initial orientation period. This buddying continued until the new worker had achieved a particular level of competency.

In two of the workplaces, Homecare Inc. and Splash Garden, experienced workers took on a mentoring role in the form of “buddying” new workers during the induction process. In these cases, as well as at Snow Time, the learning programmes took place in classroom-based contexts as well as in real-life working contexts. Buddies were involved in supporting new workers during the hands-on, actual work experience component.

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At Splash Garden, buddies were also used during the initial training period. More experienced workers acted as buddies to the new learners for three days of onsite experience (at the swimming pool during working hours), spread throughout the initial three-week training programme. While learners were encouraged to ask questions during the classroom-based training, the close contact with more experienced “buddies” during onsite experience allowed them to ask questions that arose in the course of the actual work. Buddies also assisted them to practise and refine their skills. After this period, mentoring was more informal, but as the lifeguards worked in teams, there were opportunities for people to continue to learn from others.

At Fine Wine Company the mentoring was distributed across the organisation rather than having “buddies” or specific peer support roles. At one site, the trainer was also a mentor who attended to the ongoing learning of the trainees, helping them to develop the personal and job-related attributes required to work effectively. At another site, the foreman also described how he supported the growth, confidence and competence of those with whom he worked. Mentoring practices included telling, encouraging, modelling and demonstrating, observation and feedback.

Buddying was most formal at Homecare Inc. where it occurred as part of the orientation process, with new careworkers “shadowing” an experienced careworker for a week. During that week new workers/learners observed and got opportunities to try out the tasks involved in carework. The “buddies” not only showed new workers how to do the job and advised and encouraged them as they practised new tasks; they also assessed new workers’ competence (and confidence) levels in order to guide the organisation in knowing what further support and training might be needed. Hence the buddying process was both an induction, a learn-by-doing opportunity and a way to identify current and possible future needs for each individual careworker. This suggests a “relational model” of mentoring in its focus on the learner as a whole person with specific support needs, rather than focusing on a set of learning outcomes—a form of mentoring that research has found most commonly occurs in women-dominant workplaces (such as Homecare Inc.) or when women are in the mentoring roles (Holland, 2009). Homecare Inc.’s mentoring system works particularly well given that the current buddies at Homecare Inc. have a real-life understanding of what it is like for the new careworkers; these buddies were the first group to undertake the training programme and developed cohesion as a group by supporting each other to complete the training and qualifications. They now model for learners how to talk to, and support, each other.

Homecare Inc. takes buddying a step further with a formal network designed around work content and structure. Carework has the potential to be quite isolating, both for the home-care clients who tend to live alone and require assistance for many daily tasks, and for the careworkers who work alone, visiting one client after another throughout the week. However, Homecare Inc. has created a phone-in helpline system whereby careworkers can call case managers. This presents another learning opportunity as careworker and case manager can discuss and resolve issues around particular client needs or situations as they arise. In this way case managers keep a close connection with individual clients and

their careworkers, and careworkers link into the case manager’s network of around 200 clients and up to 30 other careworkers. While many daily activities occur in isolation (the actual workplace is each client’s home for a limited period of time), the work itself is not isolating, as Homecare Inc.’s network serves to foster a community of practice and create an ongoing learning network. This network can be seen to contain elements of Poell, Van der Krogt, and Wildermeersch’s (1999) ideal learning network:

- *vertical* (management-led, worker-implemented)
  - *horizontal* (all workers solve complex problems together)
  - *external* (learners inspired by theories and methods developed outside the organisation)
  - *liberal* (learners take responsibility for their own work and learning)
- (Poell et al., 1999, as cited in Harris et al., 2009, p. 25).

Learners in all six workplaces reported finding mentoring in its various forms very important in their initial and sometimes ongoing work performance and development. In high-trust situations, trainers acting as mentors reported their own development in ways that suggest the organisation benefited (Holland, 2009). At Snow Time, the organisation benefited from the return of workers each season who were already familiar with the work, the culture and mission of the organisation. At Boeing Builders and Dig This, employers and apprentices entered into an implicit agreement to be role models (as well as experts) and diligent learners, respectively.

## Using assessment for learners and employers

### Formative assessment

Formative assessment was ongoing within each workplace, as part of formal and informal mentoring. Learners had many and varied opportunities to get feedback on all aspects of their work, including their progress towards gaining specific unit standards and qualifications. Learners were encouraged to understand the process of gaining a qualification and to share responsibility for their own progress towards this qualification.

A foreman we interviewed at Fine Wine Company exemplified the shared approach with his view of training in terms of opportunities and responsibilities. He reported that at least once a day he checked the pruners’ work and asked questions about the decisions that they had made in regard to specific vines. In his view, “every plant is different and so there are different styles of pruning”. He did not want the pruners to use a standardised approach to their work; he wanted them to think carefully about each plant and make a considered decision about the best way to prune it. “Instead of telling them they are wrong [about something], I ask them why they did it that way”.

The trainer at Fine Wine Company described how formative assessment was built into training. For example, after someone was judged to be competent to drive a tractor around the yard they progressed to towing a mower and

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mowing around the outside of the wine blocks. The trainer would “keep an eye on them, and after a couple of hours go out and have a talk with them and answer any of their questions”. He kept this process going for days until he was certain that the learner was careful and confident. At the end of each day the learner had to maintain the tractor; wash, grease, and check for any faults. He told them, “You are driving it. It is your responsibility”. One trainee we interviewed had made it his business to keep close links with the ITO training adviser who helped him and the company to keep up with the momentum he was seeking in gaining qualifications.

The employer at Boeing Builders took a similar approach. He supplied apprentices with a diary and encouraged them to make entries on their day's work. This could then be used when they completed their timesheets each fortnight and when they entered the work into their record of work. This also served as a prompt to the employer and the apprentice for discussions about the finer points of work being done or completed, and the reasoning behind work decisions and approaches.

### Summative assessment

Summative assessment occurs when an assessor makes a judgement as to whether the learner has met specific unit standards. We did not obtain substantive detail about the process of summative assessment in this research, and as summative assessment is critical to the credibility of qualifications, this is an area that requires deeper attention.

However, we observed that Fine Wine Company provided particularly clear data on summative assessment. When the learner was able to meet the SOP standard at Fine Wine Company they were formally assessed by someone from another yard on the appropriate unit standard. The trainer described how he assessed workers for a unit standard on mowing while they were doing their job:

**We observe them doing the start-up checks. We watch them driving to a block and using the mower. Then we might approach them and see if they stop when you approach [they are meant to stop]. You might talk to them about what can go wrong in a mower and how to fix it. Then you watch them wash down and maintain the equipment.**

This type of on-job assessment, to be valid and reliable, is dependent on the content knowledge and assessment skills of the assessor. It is in a different league to the “tick-off” approach that less-experienced or less-knowledgeable assessors may use.



## Implications for tertiary stakeholders

The tension between the study of the unique and the need to generalise is necessary to reveal both the *unique* and the *universal* and the *unity* of that understanding. To live with ambiguity, to challenge certainty, to creatively encounter, is to arrive, eventually, at 'seeing' anew. (Simons, 1996, p. 238, original emphasis)

This "paradox of the case study"—to reveal both the unique and the universal—is particularly pertinent in a study of this kind, involving workplaces with entirely different work and different industry content, contexts and business drivers. Our aim has therefore been twofold: firstly to acknowledge, respect and elucidate the unique models, demonstrations and adaptations of workplace learning in each individual workplace; and secondly to consider the commonalities across all six workplaces and what we can learn from them as a group about how learning happens at work.

To bring together the unique and the universal in terms of how learning happens at work, we now return to the "big ideas" guiding this project, as discussed in second section of this report: understanding learning in terms of *learning as participation* and acknowledging *different and multiple perspectives on success*. We refer to these throughout this final section and show their relevance for stakeholders looking to build a better understanding of workplace learning and industry training.

### Workplaces involve an interplay between structures and practices

Our research questions were designed to dig deeper in a New Zealand context, and they focused particularly on teaching and learning practices and effects, and on the different successful models used in the six workplaces we studied. What we found echoes discussion on existing workplace learning research in the literature reviews of Vaughan (2008) and Harris et al. (2009), which essentially pointed out that meaningful learning at work happens through a dynamic interaction between workplace structures and workplace teaching and learning practices. Our focus on observing "what happens", and interviewing a range of people about it, highlights the need for tertiary stakeholders to understand workplace learning not only in terms of the *structures* of each organisation but also in terms of the *practices* in each workplace.



Felstead et al. (2009) argue that this sort of dynamic interplay cannot be accounted by:

fixed variables such as sector, size and product market. More researchers are asserting that employee characteristics, dispositions and biographies are also important influences, but, in seeking to demonstrate the power of individual agency, they can lose sight of the contextual factors. (p. 190)

### The organisational and pedagogical dimensions of good workplace learning

On the other hand, what has sometimes been missing from research that does highlight workplace *contextual factors* is a focus on *teaching* and *learning* practices occurring there. A useful initial framework for examining and summarising the interplay between organisational and teaching/learning dimensions for good workplace learning was developed through Vaughan's (2008) literature review, which had a focus on pedagogical (teaching strategy) matters within the workplace context. The framework was developed from reviewing existing research and literature on workplace learning and posited two sets of dimensions that supported good workplace learning: the necessary structures and conditions at an organisational level (conditions based on industry regulatory frameworks and workplace- or organisation-specific policies and practices) and the necessary pedagogical approaches (learning and teaching strategies and practices adopted and adapted by each workplace). These sets of dimensions are shown in the following figure.

Figure 1:

#### The organisational and pedagogical dimensions of good workplace learning

##### Organisational dimensions of good workplace learning

- Learning is aligned with, or reflects, the (desired) culture
- Strategic directions are reflected in aims and processes
- Learning is adequately resourced
- Commitment to everyone's learning is shown
- Sufficient time is given for meaningful learning
- Innovation and thoughtful risk-taking are encouraged
- Opportunities to learn are part of everyday work
- Formal, nonformal, and informal learning are integrated
- Learning is recognised and rewarded.

##### Pedagogical dimensions of good workplace learning

- Sensitivity to the learners' pace and level is shown
- Previous learning experiences are taken into account and built on
- Learners and mentors have shared understandings of learning goals and processes
- Learners are engaged and have some ownership over the goals and processes
- Learning is relevant (personal and to the workplace)
- Learning frequently occurs in the context in which it will be used
- A flexible range of pedagogical approaches is understood and used appropriately
- Learners are supported to demonstrate new learning in context and given useful feedback to guide future learning.

Adapted and abridged from *Workplace Learning: A Literature Review* (Vaughan, 2008, pp. 40–41).

What we see clearly through this research is that each set of dimensions has critical interdependencies—especially relations between, and within, dimensions. For example, showing sensitivity to the learners' pace and level (a pedagogical dimension) on its own is unlikely to produce relevant learning without an alignment to the needs of the specific qualifications and the workplace (an organisational dimension). Similarly, there is little point in a company being committed to everyone's learning (organisational), unless the learning that is on offer is relevant to the learners, well-designed and engaging, and personally and technically relevant (pedagogical). However well-taught a learning programme may be, unless learners have a chance to practise what they are learning in the workplace and get useful feedback on their progress, the intended outcomes of learning are unlikely to be achieved. A company may invest in high-quality learning resources, but unless time is scheduled and protected for learners to engage with these materials then the learning potential of these resources is limited. The pace of learning is also an important dimension that should not be overlooked—trying to “cover” learning objectives without practice and feedback leads to “fragile” learning and to forgetting. While fast completion of qualifications may enhance the reputation of an organisation, this is not a convincing measure of what people truly understand, know and are able to do.

In other words, we are not ignoring the contribution made by individual characteristics as part of the picture of workplace learning, but we are saying that once someone has been employed (and we would imagine that individual characteristics contribute to the hiring decision), employers have a responsibility to provide the workplace culture and conditions that support their learning. A factor such as learner persistence, for example, is not just an individual trait but something that can be strengthened by workplace practices such as goal-setting and mentoring.

In most of the workplaces we studied, learning was more than getting qualifications. We observed, and heard about, attempts to take “work” beyond the repetition of everyday tasks to engagement with increasingly more complex tasks or tasks with a higher measure of accountability. The workplaces did this by carefully combining and sequencing routine and nonroutine tasks to create problem-solving challenges and rich learning experiences (Billett, 2001a), so that learners could move from peripheral to full participation (Lave & Wenger, 1991). Hence work and learning became intertwined—a situation that has prompted calls to recognise learning *at work* (Fuller et al., 2005; Gruber et al., 2008), to understand working and learning as a “conjoined phenomena” (Felstead et al., 2009), and to view the workplace as a *landscape* of learning (Nielsen & Kvale, 2005).

### Organisational structures and individual engagement

Not only do organisational and pedagogical dimensions work together to produce good workplace learning, but they influence how learning opportunities are constructed, presented and how they might be taken up and applied. Tertiary stakeholders looking to understand the workplace as a teaching/learning context need to take account of the relationship between organisational structures and individual engagement in particular, because each mediates the other. Firstly, as commentators increasingly point out, understanding workplace learning is not only a question of considering the learning processes for individuals and communities of practice but a question of considering the *impact* of organisational structure and conditions *on* learners/workers (Ashton, 2004; Billett, 2002; Felstead et al., 2009; Fuller & Unwin, 2004).

Many of the workplaces we visited demonstrated a structural-level commitment to learning in the way they presented training to workers. Training was mandatory and included in employment agreements at Snow Time and Splash Garden. At Boeing Builders, Dig This and the Fine Wine Company, training was embedded into everyday work situations and the need for that training was therefore immediately apparent and desirable to workers. At Homecare Inc., the organisation's policy for all workers to voluntarily train towards qualifications was layered into a well-structured orientation process which set up workers to believe in themselves and take the opportunity to acquire what was often a first-time formal qualification. Managers “walked the talk” by modelling an openness about learning together.

Secondly, individuals engage with organisational structures in ways that can disrupt or reconcile the organisation's plans and practices. Studies by Ashton (2004) and by Billett (2001b, 2004) argue that “individual engagement has a significant part to play in how organisational structures are both constructed and operationalised, and in turn create the conditions for (but do not determine) individual engagement” (Lee et al., 2004, p. 26). Organisational structures—the structures that set up expectations and support for learning in the case of our workplaces—are mediated by workers' occupational status and positioning, and their relationships with each other.

### Affordances

The concept of “affordances” offers a useful way to understand the mediation of learning opportunities and the possibilities to even perceive these as opportunities. Affordances refer to the qualities of opportunities offered by the organisation such that they enable the worker to perceive and take up training opportunities. Just as we earlier claimed that learning is only as good as the opportunity to actively apply and develop competencies and participate in the workplace community, opportunities are only as good as their affordances—their possibility for realisation or action.<sup>7</sup> Thus Billett (2001b) argues that a key determinant of the quality of workplace learning lies with the workplace's readiness to afford opportunities for learners to engage, and that how workplaces do this—actually *afford* opportunity—is central to understanding workplaces as learning environments.

We saw examples of workplaces affording opportunity by aligning learning priorities at a policy level with practices that supported learners to perceive opportunity, undertake training towards qualifications and complete the qualifications. Homecare Inc. and Splash Garden had trainers and managers with a particular affinity for, or understanding of, their learners' experiences and concerns. They instituted measures that allowed learners to really engage—often for the first time—in formal learning in a context that did not threaten them. Learners in these workplaces and at Fine Wine Company and Boeing Builders saw their managers and trainers “walking the talk” by making their own learning visible and integrated into the training programme. Many workplaces also provided learning materials (workbooks, SOPs) and resources (study rooms, practice areas and time to practice) appropriate to their workers' needs. They also created mechanisms to recognise learning success through graduation ceremonies, increases in pay and responsibility, and integration into communities of practice. The affordances were high-quality in that they were offered across the organisation, they enabled workers to perceive themselves as learners and the training as a *meaningful* learning opportunity, and they resulted in real actions in the workplace (e.g. improvements in service quality, product development and workplace relations).

7. Gee (2008) described affordances as “action possibilities posed by objects or features in the environment” (p.81).

## Implications for tertiary stakeholders

What an organisation provides does not mean that learning opportunities are afforded evenly across the workplace, however. Billett's (2001b) work shows that affordances can be differentially distributed according to the perceptions of individuals' competence (including their own perceptions of themselves), the worker's race and gender, the status of the work and the worker's status, and personal relations, workplace cliques and affiliations.

We heard anecdotes from workers about former workers who had not been able to complete qualifications and had left the company. We also saw some examples through the different perceptions and take-up of opportunities by workers within the same workplace. For example, some workers at Snow Time appreciated the chance to gain the National Certificate in Tourism but did not particularly value the qualification, while others eagerly sought recognition of the competencies gained and saw the qualification as a gateway to future employment opportunities. In another workplace we met a trainee who was frustrated by the lack of learning opportunity and its impact on the speed of his advancement towards achieving a qualification. The trainee's colleagues, on the other hand, seemed relaxed about their opportunities and we do not know whether this was a difference of expectation—either trainees' expectations of themselves or management expectations of different trainees—or something else (e.g. length of service, age). However, it seems clear that organisational structures and workplace contexts “constitute sites of engagement” for learners (Lee et al., 2004), rather than unproblematically constituting sites of learning, because workplaces can shape the kind of learning that can take place, including the motivation for people to learn. Thus organisational structures do not just “bear down” on individuals and determine possibilities; individuals and groups also mediate access to workplace learning and construct what it means. This was particularly evident at the “corporate” workplaces, where access for ongoing training was part of the organisational structure, but it was up to the individuals to voice their desire for it.

### Learning happens because someone teaches

While humans certainly can and do learn things without a formal teacher, our workplaces highlighted the important role that a designated teacher or trainer has in helping trainees and the business make the most of learning opportunities. All six of our workplaces had someone to manage the learning programme overall and someone to carry out teaching. At the swimming pool and homecare and tourism workplaces, these roles were distinct, with a different person taking charge of each. At the vineyard, builder and landscaper, one person carried out both roles. In only one instance (the homecare provider) had the teacher or trainer completed professional qualifications (Certificate in Adult Education). The trainer or teacher is rarely professionally-qualified in workplace learning contexts. However, their role is critical.

A number of the teachers and trainers in our six workplaces understood the critical nature of their role. As the vineyard trainer and workplace-based assessor said, “With the right training, anyone can do anything.” The trainer's practices (being attentive to his learners' needs and adapting accordingly) and his outlook (seeking feedback from learners and constantly trying to improve what he does) exemplify what people often refer to as being a “born teacher”:

**Irrespective of the form of the learning, or of its location, there is now considerable evidence to suggest ... that the effective practitioner today is one who actively seeks out opportunities for new learning and who is constantly scanning the environment in an attempt to predict what the major new directions will be. (Matthews & Candy, 1999, p. 50)**

Trainees we interviewed appreciated their trainers' efforts, citing these as significant in their confidence to undertake, as well as ability to complete, qualifications. This was pronounced in cases where trainees had previous learning experiences (usually in school) that were less than ideal, and which had left them with a sense that they were “bad learners” or not “brainy” enough. Many of these interviewees told us their trainers were pivotal in supporting them and in modelling an open attitude to learning that allowed them to feel relaxed about engaging in a training programme.

Another dimension of the teacher/trainer responsibility came through in the sense of commitment to a higher principle. For example, the tutors at Splash Garden felt they were contributing to their community in return for the opportunities they had been given. James the builder, and George the landscaper felt an industry responsibility to reproduce the skills in their respective trades. Sophie at Homecare had a distinct commitment to quality of care for people in their homes. Similarly at Snow Time there was a strong company ethic that self-development could benefit others.

Given the importance of the role of teachers in workplace learning that we have found in our case studies, there is scope to consider what support can be given to people who take or are given this role in organisations. A lead might be taken by ITOs to consider some form of qualification for trainers and training, as they currently do for assessors. Such support may not necessarily have to be formal (in the sense of linking to qualifications). For instance, ITOs could foster and facilitate discussion groups of trainers modelled on agriculture extension in which farmers meet at each other's farms to discuss and compare practice based on the actual situations of the discussion group participants.

### Learning is for doing and for participating

In addition to focusing on what happens in workplaces, we now also know more about learning—namely that it can and does occur in noninstitutional settings, within a participatory paradigm of learning, which still includes some aspects of the acquisition paradigm (people do know things in their heads), but focuses on the learning as valuable and fully expressed in its performance or mobilisation. We can also see evidence of the long reach of institutionalised education in our workplaces: three of the six used a classroom-based approach. However, some distinctively also used group learning, and all tied the classroom work very closely to on-job work.

Early in this report we argued for a view of learning as participation and explored how this idea lent itself to understanding and researching learning in workplaces where learning context and content is authentic and immediately relevant because it involves participating in the actual work. We laid out the idea of learning as participation in terms of learning as a social activity that includes individual dimensions, rather than a solely individual activity. We discussed the way that learning comes from experiencing, and participating in, the relations, content and context of work—often conceived of in terms of membership in a community of practice.

This is entirely different from understanding learning-as-acquisition of knowledge by the individual. For one thing the learning as participation perspective leads to an emphasis on the relationships between people (e.g. teacher–learner; learner–learner; employer–trainee; old-timer–newcomer) in learning activities, rather than focusing solely on internal, cognitive developments. For another thing, it immediately directs us to look at how learning is situated—that is, to consider the ways the context (physical, emotional, architectural, social, technical, etc.) of learning impacts on learning processes and outcomes. Thus learning is really learning how to “be” and “do” in relation to other people, situations,

and the production aims, tools and artefacts of the workplace.

From what our research team observed of workplace learning activities in our six workplaces, and from what we discussed with participants in interviews, all of the workplaces carried a strong presumption of learning *for* something. There was no sense of “learning for learning’s sake” or accumulating knowledge “for its own internal value”. Repeatedly, trainees and experienced workers told us about what learning helped them to *do*, how it allowed them to do it better than before and the kind of access it gave them to *doing more with* others at work or in the industry. Trainers and managers explained the way their organisation attempted to align both the content and teaching approach of the learning programmes or activities with the company’s production or service aims. Mentors explained their role in bringing less-experienced workers into the team, enculturating them to the workplace’s practices and fostering the growth of their expertise *as they participated* in the work.

We can understand the content of work that people learned as “domain-specific expertise”. The home-care workers developed domain-specific knowledge through learning skills and behaviours to care for people in homes; they were not learning skills and behaviours to operate a ski-lift or to dive into a pool to prevent a drowning. In building up domain-specific knowledge, our learners were becoming experts in their domain and as such were increasingly able to adapt the skills and behaviours they had acquired to different contexts, albeit contexts bounded by the work domain they were in. From the point of view of the learners, their employers and of the training organisations, the gaining of expertise signals successful workplace learning outcomes.

### **A broader sense of participation: Beyond learning domain-specific expertise to building human capability**

Although it was not the focus of this study, interviewees also told us about what their learning allowed them to do in other ways, beyond participation in the workplace. In the voices of the learners across the workplaces we visited, there was a strong sense that the learning was opening up possibilities for the learners to be or do things they valued in their lives. Thus whilst focused on enhancing the productive aims of the enterprises, at the same time learning was enhancing the freedoms of the learners themselves to participate in wider social life as citizens. These voices were particularly felt by the so-called “low-skilled” workers at Homecare Inc., Splash Garden, and at Snow Time. For example, the women at Homecare Inc. reflected on their increased confidence in themselves through their learning, saying “I’d had self-doubt but that’s not a problem any more” and “I’m not too old to learn”. The workers at Splash Garden valued the way in which the learning enabled them to be part of the community and to meet new people: “I love my work so much, I like to come in on my days off to see my friends.” The front-line workers at Snow Time valued the training they received as it “lets me think about my work and is good for reflection”. There is a sense in these voices of the way in which the workplace respects these learners for who they are and who they want to be, and enables them to voice this and to act on it.

These wider, more social outcomes to workplace learning move the skills policy debate, and questions over where learning does or should occur,

beyond concern with its more immediate productive outcomes. Within the richness of practices constituting successful workplace learning that we have observed, we see also the interplay of institutions, structures and practices that enable people to participate in society. This broader interpretation of the outcomes of successful workplace learning resonates with recent work in the European Union in linking human capabilities to social policy that supports an economic policy drive towards knowledge-based economies. It also resonates with work in the New Zealand context by Bryson and O’Neil (2010) on the developing human-capability-at-work framework. Findings from this project show capability to “do the job” is just one of the ways in which workers define themselves. They point to examples where workers purposefully developed self-knowledge and self-awareness through training that was ostensibly for the purposes of “doing the job”, and where workers’ motivations for entering a job are associated with the different things they bring to, and take from, their work. “This led us to think of human capability as freedom to achieve things” (p. 23). This also resonates with the skills-ecosystem approach developed by Buchanan in Australia (Buchanan & Jakubauskas, 2010).

There are implications here for stakeholders involved in workforce preparation and workforce development. Building human capability is also a cornerstone of career development theory which links career guidance to workforce development through the framework of career and life management policies and practices. The five-year Pathways and Prospects’ study, for example, provides a clear example of the ways that young people approach this career and life management, based less on a consideration of what they can *do* than who they can *be* (Vaughan, Roberts, & Gardiner, 2006). There is also evidence of the desirability to become a “learn-*ing* worker”, as distinct from a “learn-*er* worker” looking only to become a “learn-*ed* worker” in the narrow sense of getting good at their job (Vaughan, 2010). Stakeholders interested in creating more awareness of industry and trades training options for young people might want to take note of the range of young people’s motivations and aspirations below the surface of an expression of interest in a particular industry area.



### Knowledge change through learning at work

We have been able to study six examples of industry training that have the makings of successful learning arrangements. Obviously, the completion of qualifications is not, in and of itself, an indicator of success. It can only be regarded as a key indicator of success where it is clearly linked to workplace performance and positive change in human capability. We saw that all six workplaces applied principles of good teaching and learning to their specific workplaces and business imperatives to achieve this. Furthermore, they afforded opportunities for meaningful engagement by workers/learners.

The implications go beyond what we have learned about how learning happens at work. They extend to the process of learning itself and to our conceptualisations of knowledge. By seeing learning as contextualised and participatory, we are led to question assumptions—shaped by our experiences, and the accepted place, of institutionally-based education—about how knowledge and skill can be developed and applied. We still see evidence of experiential learning being considered second-rate or “a stepchild in the academy” (Harris, 1998, p. 41), because of its inductive nature (bottom-up, based on observation and experience), rather than taking a deductive (general and theory-based) form favoured by institutionally-based education.

We can also see how assumptions about the value of certain forms of education relate to the way that we perceive the value and skill level of different types of work. We researchers were forced to reverse a preconception that we had held about the skill levels of the workers/learners whom we later observed. The occupational classification of workers in the six workplaces defined most of them as low-skilled<sup>8</sup> and we at first took this at face value. However, through our observations and interviews, we began to question the idea of “low skill”, especially since we repeatedly saw just how much skill was really involved in people’s work once we got to understand it more. For example, we saw that tending grapevines involves a constant adjustment and judgement rather than blind adherence to a schedule. We also saw that in-home-care and lifeguard duties involve significant and complex “emotional labour” (Hochschild 1983, 1989, as cited in Payne, 2006). Workplace learning linked to certificates that accredit these occupations as technically low-skilled potentially reinforce existing social forces of discrimination evident in still-popular ideas about domestic labour and interpersonal relations as mere “women’s work”. Because certification forms a large part in determining where an occupation lies in the hierarchy of skill (hence in the perceived market value of these occupations), we wonder whether the certification adequately reflects the skills in these occupations.

Our research has also underlined both the “long reach” of institutionally-based education—with half of our workplaces employing a classroom-based approach common to institutional settings, and its possible transformation. Our workplaces combined a classroom approach with on-job learning and, since learners were also employees, the classroom-based work was immediately relevant and obviously “real life”. Studies

of formal, informal and nonformal<sup>9</sup> elements in workplace learning do suggest that these different forms of, and contexts for, learning occur “naturally” in combination. A review across such studies shows that none of these learning modes are inherently superior to the other and that no theory of learning ever only applies to just one mode, which means the challenge is not so much about how to combine different modes (in reality they are already in combination), but how to recognise and study the nature of the informality and formality, the balance between them, and the implications of the balance (Vaughan, 2008). It therefore becomes important to consider the balance and relative strengths of each in combination because it is the combination that is increasingly essential for a continuous adaptation of vocational competences to changing requirements of the labour market (Gruber et al., 2008, p. 6).

We were also interested to see something happening in workplace learning that was more akin to *ako*.<sup>10</sup> We note that such a relationship and approach might be more possible in the workplace than in institutional classroom contexts because in workplaces people have roles additional to learning, such as worker–employer–trainer and learner–worker roles. In school classrooms there are always teachers who have less hierarchical relations with their students and some even make transparent their own ongoing learning and learning processes. Similarly in some workplaces there is a clear learned master to novice-apprentice relationship. However, the workplace has interesting potential here because the relationships are not so much about learning as about performance, production and participation. Group learning and the dynamics of *ako* in the workplace are still less known through research than individual learning, and the temptation is to assume learning is “a hierarchical one-way process ... a consequence of teaching” (Nielsen & Kvale, 2005, p. 124). However, studying workplace learning opens up the potential to learn about forms of *reciprocity* in learning.

Once we open up our understanding of how learning happens at work, and therefore how learning happens at all, we get a taste of how people’s roles are expanding, or need to, for a modern society. In a modern society, the roles of workplace and educational institution blur because employees increasingly need forms of knowledge that cannot be learned only “in practice” (on-job without any theoretical background or principles), and institutions cannot any longer prepare people in any final or fixed sense for something that can be predicted to happen later. As Felstead et al. (2009) explain, this more open understanding of learning purposes and processes:

**demands a realisation that employers need much more help if they are going to maximise the learning potential within their organisations. It is far easier to send people on a formal training course than to re-organise production processes or re-design jobs in order to expand opportunities for on the job and incidental learning. (p. 5)**

We hope that this research provides a good basis for thinking about such a reorganisation of production processes and workplace structures and practices to promote learning, production and human capability.

8. The occupational classification, ANZSCO, ranks the occupations of many of the workers in our study such as community workers, carers/aides and hospitality workers at level 4 in a skill hierarchy from 1 (highly skilled) to 5 (lowly skilled). This low-skill ranking in occupational classification is based on judgements made by the classifiers on the formal qualifications, competencies, experience, subject matter knowledge and the degree of specialisation in the use of tools and equipment or in the production of goods and services, deemed necessary for these occupations (Statistics New Zealand, 2009).

9. The OECD (Doyle, Simota, & Werquin, 2009; Misko, 2008) defines these as follows: formal learning is learning in courses or programmes leading to nationally and internationally recognised qualifications; nonformal learning is learning that occurs in structured programmes but does not lead to accredited final qualifications; and informal learning is learning acquired through everyday work and life.

10. The concept of *ako* describes a teaching and learning relationship, where the educator is also learning from the student and where educators’ practices are informed by the latest research and are both deliberate and reflective. *Ako* is grounded in the principle of reciprocity and also recognises that the learner and whānau cannot be separated (Ministry of Education, 2009, p. 20).

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## Case study 1: The homecare provider

### Introducing Homecare Inc.

Homecare Inc. is a not-for-profit community organisation providing a range of services for people who are older, homeless, disabled or requiring family support. It collaborates with, and provides advice to, a number of other community and government service providers. For the purposes of this study, we focused on one workplace, dedicated to providing in-home services to older people through a contract to a district health board (DHB) and people with disabilities through a contract to the Ministry of Health (MOH).

#### Workplace members and research participants

The Homecare Inc. branch at the time we visited had a staff of 222, including:

- a service manager who oversees the training programme
- a staff development/quality leader who manages recruitment, induction and staff development, and also trains the workers directly
- 201 homecare workers
- 8 case managers
- 2 support co-ordinators
- 2 administration staff

One of Homecare Inc.'s strategic objectives is to challenge social injustice and provide hope to the wider community. The organisation singles out training as part of this objective; most of its staff have not had other formal learning opportunities in life since secondary school.

Homecare workers are described in Homecare Inc.'s promotional material as "the heart and soul" of the service.

We interviewed the service manager, staff development/quality leader (trainer), three case managers (completed Level 3 qualifications and currently undertaking Level 5 training), three experienced homecare workers (completed Level 2 and Level 3 training) who serve as mentors to new Homecare workers, and three new homecare workers who recently completed the orientation to the service programme. We observed two sessions of Level 2 training with seven Homecare workers.

Homecare Inc. has a very strong values base to its operations, as reflected in its mission statement about "building a socially just and inclusive society". Perhaps because of this values base, Homecare Inc. was involved early in the piloting, and subsequent early adoption, of "embedded workplace-based training" developed by its ITO, Careerforce (the Health and Disability Sector ITO). This model of workplace learning initially led to the development of a new National Certificate in Community Support Services at Level 1 on the New Zealand Qualifications Framework (NZQF). Subsequently, as other learning programmes have been developed by Careerforce, workplace learning at Homecare Inc. can now also lead to National Certificates at Levels 2, 3, 4 and 5.

#### Workplace learning structure

Workplace learning at Homecare Inc. is very structured and programmatic. The general trajectory for new workers is as follows:

1. orientation programme for a week which includes working alongside buddies (experienced workers)
2. compulsory training—modules in health and safety, abuse and neglect, manual handling and other topical issues (endemic)
3. training and coaching opportunities (these may be performance-related)
4. client-based training—where applicable, training is offered to homecare workers with clients who have very specific needs (e.g. use of particular equipment or routines)
5. training towards Level 2 qualification over 6 months (optional but strongly encouraged)
6. training towards Level 3 over a year (also optional but strongly encouraged)
7. training towards Level 4 and 5 qualifications (for those looking to move to more responsible positions).

There may be more training possibilities as Homecare Inc. considers adding workplace verification to the buddying role.

After homecare workers have been in employment for three months and they are working more than eight hours per week, they are strongly encouraged to participate in further workplace training beginning with the National Certificate in Community Support Services at Level 2 on the NZQF. Many homecare workers have completed this foundation-level study and are now studying for qualifications in Community Support Services at Level 3 on the NZQF.

The formal workplace learning at Homecare Inc. occurs through formal teaching sessions once a week and through the homecare worker learners completing the workbooks in their own time. Homecare Inc. has a dedicated trainer for in-house delivery of the formal training. As discussed in a later section on support for learners in Homecare Inc., the pastoral role that Sophie the trainer fills in assisting the learners to learn may be a feature of the set of support practices that make Homecare Inc. a successful site for workplace learning. That training time is set aside as part of the paid work week is also suggested as a feature of the support practices at Homecare Inc.

Half of Sophie's role at Homecare Inc. is to undertake staff development—mainly through teaching the in-house sessions. The other half of her time is as a quality leader. These two roles complement one another and is a key role for Homecare Inc. to meet its organisational goals. Sophie helps to recruit new workers, so she knows their backgrounds and their learning needs. She establishes and manages annual training plans for all homecare workers at Homecare Inc. She has been a case manager for Homecare Inc. so knows the work that is done by homecare workers. Having a person dedicated to a staff development role that is directly linked to the quality service needs of the organisation is perhaps a practice that supports successful workplace learning. This is because there is someone in the organisation who has the responsibility for good workplace learning to happen.

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### Training investment drivers

As Ryan (2009) notes in her report on the benefits of embedded workplace learning, the workforce development and training of those involved in the provision of home-based services to older people needs to be considered in the wider social context, because changes in that context have driven particular demands on service provision. The home-based service sector has grown considerably over the past 20 years, as the ageing population in New Zealand has grown. In addition to an increase in demand for homecare services because of the growth in the *number* of older people, there is an increased *desire* within this segment of the population to remain living in their communities and receive services oriented around their individual needs. This demand is complemented by legislation which confers a number of rights on all clients of health and disability services in New Zealand, and which places corresponding obligations on the providers of these services. This increased demand for quality home-based care has led to a corresponding increase in the demand for labour in this sector, a demand which the sector has had difficulty in meeting.

Work in this sector has historically been undervalued because of the domestic, hence non-market, base to this work. As Ryan (2009) notes, research shows the workforce to be overwhelmingly female, with higher than average proportions of Māori, Pasifika and new migrant workers in the sector. Work is often part-time, and wage rates are at or close to the minimum wage. Many, if not most, workers in the sector do not hold formal qualifications. There is evidence of low levels of language, literacy and numeracy skills among workers in this sector. There is also evidence of little incentive for providers to invest in training because of the individualised nature of contracting arrangements between providers and funders (often DHBs) (Ryan, 2009, p. 8). These factors combine to limit the supply of well-trained care and support workers.

The training initiatives by Homecare Inc. therefore have to be seen in this wider social context and as part of an industry-wide response to address labour and skill shortages in this sector.

Whilst Homecare Inc. as an organisation has a high-level values base to build a thriving, inclusive and caring society, it is nonetheless a business that has to compete with other providers for a customer base from the homecare funders (mostly DHBs/MOH/ACC). There seem to be two business drivers that support Homecare Inc.'s values base. The link, or the process, by which these drivers lead to achieving the organisation's values is workplace learning.

The first driver is to be recognised as a quality homecare provider. The route to being competitive in this area is complex, but hinges on organisations having policies and procedures in place to meet service standards for the sector and having training systems in place to certify the training of homecare staff to the level required to meet the standards of care in their work. Homecare Inc. has such an infrastructure in place, thus is well able to compete for the provision of homecare services in this evolving environment of outcomes-based funding.

The second driver is to ensure that the organisation receives a return on the investment in the training of its staff. There appear to be two related aspects to achieving a return on this "cost" driver. One is to engage the hearts and the minds of the homecare workers so that they deliver the service to the quality outcomes expected of their work. The second aspect is to be cost-effective in the delivery of the relevant training programmes. Both these aspects are related through the (again quite complex) social relations developed in the workplace that ensure that learning, and the right learning (that is, that the homecare workers effectively utilise the training they receive in their work), occurs—as distinct from events where training takes place and learning is assumed to occur.

### Success at Homecare Inc.

There are a number of homecare worker performance measures that indicate that Homecare Inc. is supporting its business drivers through the training of its homecare workers. The most significant indicator is that the homecare workers are motivated to work for the organisation and to deliver the quality of support expected. Without exception the homecare workers we interviewed loved their jobs. Olivia, for instance, said that she "can't believe that what [I] do at Homecare Inc. is a job because [I] enjoy it so much". Olivia also views work and training as a package. In a similar way, Ruby said that her "role is very busy but [I] love it, and want to stay". Anne, similarly, describes her main responsibility as "ensuring that [my] clients' needs are met". Importantly, all the workers we interviewed indicated that the training gave them confidence in their jobs. Charlotte, for instance, has "gained confidence by knowing that [I am] doing the right thing" and "in being able to confront situations and deal with situations better". Similarly, Isabelle believed that "the more training you do, the more confident you feel and the more you can give". Evidence for this work motivation is also captured in various statistics the organisation has gathered since the training began. These include a big drop in the number of "complaints" the organisation receives, a corresponding increase in the number of "compliments" from clients, and a large decrease in accidents in clients' homes.

Two other performance measures indicate a good return on investment by Homecare Inc. in training. The first performance measure is the high completion rate of qualifications that the homecare workers are studying for. The second performance measure is the dramatic decrease in the turnover of staff since the training began. Homecare Inc. is thus directly gaining from its investment in training rather than being a trainer for other providers in the sector who are "free riding" on this training.



## Taking learners' previous "learning careers" into account

There are a number of processes that occur at Homecare Inc. that seem to facilitate learning. Many of these processes build upon the personal histories of the homecare workers in a manner that supports their motivation to learn and minimises their barriers to learning.

For most of the workers interviewed, beginning their study towards these qualifications was quite a challenge. This was again largely due to their personal histories of little prior engagement in formal learning during their working lives. Most had left secondary school early and did not have great schooling experiences. Ella, for instance, who left after achieving School Certificate, "wagged a lot, got a bit lost in the mix"; Chloe "didn't like school much ... wasn't really interested"; and Isabelle left school at 14 without any qualifications. As a consequence of these early schooling experiences, generally these women did not have a lot of confidence in their ability to learn and complete the qualifications. Emily, for instance, described being "very apprehensive [in starting Level 2]" because she had not studied for a long time, and recalled asking herself "Is my brain agile enough, can I do this?" prior to beginning study. Similarly, Zoe described being "nervous" and asking herself "Could I do this ... can I handle it?" prior to starting the Level 2 study.

In contrast, all those homecare workers who had undertaken the Certificate training, but who earlier had reservations about their ability, reported in their interviews a change in their confidence to complete the qualifications and a desire to continue with ongoing study. Emily, for instance, reported, "In the second session it occurred to me, 'I can do this', and the struggle stopped. It was like a revelation. I'd had self-doubt but that's not a problem anymore". Emily is doing the Level 2 Certificate and wants to go on and do the Level 3 because she now has the confidence that she can succeed at this. Zoe has learned that "I'm not too old to learn".

There has thus been a change in the confidence of these homecare workers in their ability to succeed at studying. This confidence in their own ability in turn motivates them to do the Certificate qualifications.

There is no one thing that seems to have caused this change in attitude. Rather, there is a cluster of mutually-supporting practices which have done this. One of these practices is coercive—that to be employed as a homecare worker at Homecare Inc. you are required to attend the orientation, be buddied and assessed, and heavily expected to take up further Certificate training. The other practices are, however, supportive to this requirement and expectation.

## Revaluing prior learning and skills

The personal histories of most of the homecare workers are ones of considerable engagement in domestic work (that is, unpaid work within a family setting). Most are mature women, have raised children, cared for sick relatives and have managed domestic work for many years. They thus bring to their paid work at Homecare Inc. a broad range of prior learning and experience in domestic work like cleaning and so on, as well as relationship management skills such as managing conflict. In addition to doing domestic tasks in homecare work, Ava, for instance, talks of managing "quite challenging clients", and Zoe talks of "clients getting stressed and you have to calm them". Similarly, Emily describes

dealing with a range of clients, "some kind, some nasty and sharp, but you must be confident so that they can feel safe and confident in you". Historically, because this work has been done in the home and by women, the skills involved in domestic work such as washing people or things, and in managing relationships, have been, and still are, undervalued, even unrecognised, as marketable skills in paid employment. It must therefore be somewhat reassuring, even revelatory, for these women to now be in social settings where these skills are recognised as valuable through being paid for doing work they have previously done "for free" as well as receiving the extrinsic rewards from clients who are grateful for the home help they receive and from the Homecare Inc. organisation that recognises these skills in their training programmes.

Thus, whilst the content of what is taught in the training programmes, particularly at the lower NZQF levels, is fairly basic in its skill content, there is a strong sense of individual motivation or mental energy to focus on connecting the training with what they already know and understand, thereby making it more likely that the new learning will be used in practice. For example, the learners—mainly women—are able to generate meaning from the content of the training because it is knowledge they have already used to deal with the challenges of their own domestic lives.

The essential point here is that for learning to occur, training must encourage individuals to be motivated to provide and direct their mental energy into the learning process. In the case of Homecare Inc. it is argued here, a large part of this motivation arises through the social relations at work that value the very skills learners have had to use to manage their domestic life but that have not been widely recognised as socially valuable skills, even amongst learners themselves.

There is a caveat here though in that what is valued in terms of a wage and in the training content of the programmes are the domestic skills these women have. The more complex skills of emotional and relationship management, which these women have and utilise in their work to provide "quality care", do not seem to be recognised and thus valued.

## Scaffolding: teaching so that it counts

This caveat notwithstanding, the sensitivity or mental orientation towards learning is reinforced by the content of the training programmes. Examination of the programme content at NZQF Level 2 together with observation of a learning event shows that the knowledge being taught is mostly assimilative in nature. That is, the new knowledge being taught adds to, or builds upon, what the homecare workers have already learned and given meaning to in their prior personal histories. There are two aspects to the success of this assimilative learning. First, the knowledge extends what they already know, thus there is some challenge and interest in the meaning attached to this new knowledge. For instance, in the learning session we observed, the topic was infection control. Whilst the pedagogy of the teaching will be built upon later, the training session moved from identification of infections learners already knew about, thus the learners' prior knowledge was activated, but then went deeper into different types of infections, how to deal with situations where infections are observed and techniques to prevent infection being passed on. Secondly, and relatedly, the teaching linked this knowledge to the situations the homecare workers were experiencing in their everyday work. As such, the new knowledge was learned in the direct sense of

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a capacity change in the minds of the homecare workers to be able to easily recall and apply the new knowledge being taught. The homecare workers were aware of the power of this context. Olivia, for instance, was positive that the skills she learned were “always relevant in my job, and [I] always apply and use them”. Similarly, Amelia says “[I] always get to use the skills [I] learn in [my] classes in the workplace and using the skills in the workplace consolidates [my] learning and allows [me] to get to the point where [I] can do some tasks automatically”. To Ruby also, the lessons are “really immediately relevant, and what we do on a daily basis—we didn’t have to pretend anything, it’s all real”.

### The learning and working support network

A number of the homecare workers we interviewed made the comment that they always felt supported in their work. This comment was usually made in the context of relating previous negative work experiences where “you were thrown in at the deep end” and expected to do your job with little or no training. At Homecare Inc., in contrast, Olivia says, “they are very thorough and they wouldn’t put you in a situation that you weren’t comfortable with”. Of the various forms of support that homecare workers receive at Homecare Inc. one which assists learning, particularly for new workers, is the buddy system and phone-through help to the case manager. The difference between the “workplace” at Homecare Inc. and other workplaces lies in its “virtual” nature. Rather than being located at a fixed geographical location, the workplaces are people’s homes. Homecare workers therefore are potentially isolated from their colleagues, and may find themselves in difficult situations where their learning is insufficient. On starting employment at Homecare Inc., new workers undertake an orientation programme which covers the basic requirements of the role, introduces them to the policies and procedures at Homecare Inc., and assesses their competency to perform tasks safely and to the required standards. During this orientation, new workers are “buddied” with an experienced worker to observe and experience tasks involved in homecare work and to have their competency assessed in performing these tasks in the “workplace”. Olivia is a new employee and has recently completed the orientation programme which she says “has given [me] insights into what [I] have to do for [my] job and the company procedures”. This included two buddy days which she says were invaluable because “you have the opportunity to ask the buddy questions if you can’t remember and you get to apply what you have learnt in the orientation session when you are with the buddy and gain practical experience”. She says “you just don’t stand around looking”, in describing her experiences on buddy days, and that the two systems work well in sequence. It also provides new employees with a sense of the “big picture” involved in the work, as well as the specific knowledge to begin work, well supported by the learning and support infrastructure.

Beyond this orientation and buddy introduction to learning the work, homecare workers are only a phone call away from the case managers who can provide advice in situations the homecare workers find themselves unfamiliar with. Olivia, being new, communicates with the case manager a lot, and says that “it helps that [I know] there is support available and that [I] can contact the case manager at any time”. Ella is also new to her job and values the “security and reassurance in this job—I ring them [case managers] to check things, they are there whenever you need them”. This ability to keep in contact with colleagues is valued by experienced homecare workers as well. Isabelle, for instance, knows that “there is contact available if [I] need it”, and if she has a query, she can call in anytime and speak to the case manager.

The support of experienced workers through demonstration and direct communication, therefore seems important in workplace learning, to reinforce what has been taught but not fully mastered, and to assist in problem-solving in new, unfamiliar situations.

### Mentors and buddies

One important practice is a culture of mutual support from experienced homecare workers. The core of this support is the workplace “buddies”. Most of the staff working as buddies were the original “guinea pigs” in the development of the Level 2 and Level 3 qualifications. Having done these qualifications, they understand what it is like for the other homecare workers who are doing the courses. They themselves worked as a group when doing the qualifications. As Charlotte states, “we talked to each other in smaller groups outside of class to help each other with our learning”. Similarly, the more senior staff case managers have also done the same Certificate programmes. This core of experienced workers who have done the training and have a shared understanding of what it is like fosters a culture of encouragement of each other and of the new learners. Isabelle, for instance, valued the encouragement she was given, particularly that of a buddy who supported her during a difficult personal time. Jane recognises how important achieving the qualification is to this confidence in ability to learn. She thus encourages those learning, stating, “at first they run away at the thought of study, but I encourage, I support too”. Several homecare workers mentioned the pastoral care role that Sophie, the trainer, filled in encouraging them in their study.

### Resources: Workbooks, family

As new learners who were lacking in confidence, several learners mentioned the value of the workbooks and that the level in these workbooks was graduated very well to the level of the learner. Amelia, a case manager, is now doing Level 5 on the NZQF and finds that the training is “‘stepped’ really well, so that you can progress easily”. Isabelle is a homecare worker doing Level 3 and specifically enjoys the “way the qualifications are graduated in levels”. Lucy similarly thinks that “the training books are really good”. She struggled a bit with the first book as she “had not put pen to paper for years”, but she was fine with Sophie’s (the trainer’s) support.

The support from family that the homecare worker learners received to do their study was quite variable. Isabelle, for instance, values the support of her daughter with her training, as does Amelia. Others, however, find little family support. Emily, for instance, recalls phoning Sophie (the trainer) for support because “my family think I’m a nut, why get qualifications at this stage [of life]. Why not retire and crochet?” The structures around the learning in this context of variable family support therefore become important. The learners have the choice of working on their qualifications during the weekend (or their own time) or in work time. They get paid to attend the training events either way. All the materials are supplied and their fees are paid. If the learners cannot find a quiet space or time at home to study, there is a quiet room at Homecare Inc. that they can use. Thus what seems to aid the learning is flexibility in the course delivery to fit in with life at home and the support family offers.

### Teaching and learning strategies

In her role, Sophie is the instructor in the teaching sessions. We observed the training in two classes at Homecare Inc. The classes were crammed with examples of excellent teaching practice and strategy or approach

(pedagogy). The training took place in one room which was set up much like a typical classroom. This lent a certain gravitas or seriousness to the training session and positioned the trainer as a credible expert (in the recognisable position of 'teacher'; standing while the trainees sat, and operating from the front of the room while trainees sat together at long tables). This fits with what the training manager (also the trainer) told us about letting potential trainees know that the learning would not be easy but that they would be well supported. The trainer set up the session very clearly—writing up what would be taught and what trainees would know by the end of the session. She then set up a range of activities to *actively* engage the trainees, encourage their progress and maintain an enjoyable and trusting environment for the class as a whole. Such activities included:

- a lot of questioning of trainees—more questioning than telling. Sometimes questions were directed at the group but more commonly the trainer would call on individual trainees by name, in turn, at different times and in a very relaxed, friendly tone. There was clearly a culture of openness and trust already in the group. Nobody made fun of any of the wrong answers that were given and the trainer was deft in the way she corrected trainees and praised them for correct answers or for nearly getting it right
- questions used often ran to “what if ...” scenarios and were designed to get trainees thinking beyond textbook examples. The trainer was clearly getting trainees to *move between the theory and the application of it to a range of different situations*
- encouraging trainees to make up scenarios and give their reasoning—“describe for me a situation when you might use this protocol *and why*”
- directing trainees to work in pairs or small groups at times so that trainees were engaging with each other and not just through her
- use and encouragement of humour
- tactile and practical activities—passing around products, trying on gloves, completing incident forms.

Overall, the trainer clearly had an extensive *repertoire of teaching techniques* at her disposal and although the trainees were there for about four hours of training, it didn't feel long or tiring because the trainer *varied the activities, modes of engagement and the pace of the class*.

So it wasn't just factor “X” or technique “Y” that made the teaching good here; it was that the trainer was skilled in a whole range of techniques and situations and could dynamically adapt these to each individual as well as to a whole class. This is no accident—the trainer has a number of adult teaching qualifications, in addition to her industry qualifications.

This direct guidance by a credible expert would seem to be a feature of successful workplace learning at Homecare Inc.

### **Conclusion: Successful learning requires breadth in supportive structures and practices**

At Homecare Inc. we found a suite of interdependent organisational and teaching/learning approaches which were both supportive of and supporting to learners. There was top-level organisational commitment to learning, driven by a correspondence between the organisation as an actor in wider sectoral issues (particularly in the supply of skilled workers to this sector), and its self-interest as a quality supplier of homecare services to the sector funders (primarily DHBs). This translated at lower levels in the organisation to the appointment of a training manager/trainer whose responsibility it was to see that training occurred.

In this organisation, there was considerable emphasis placed on formal training episodes. Nevertheless, such training episodes did not assume a pure 'learning as acquisition' approach to learning. Rather, there were interdependent participative practices and structures through which individual learning was acquired. These included the training practices used by the trainer such as participative learning groups and her manner of questioning and drawing out of learners their prior knowledge and how the skills being taught could be applied across different situations. These include the formal use of buddies for new learners/workers and the culture of support these buddies have due to their own experiences as learners. These also include the resourcing of learning—both with formal learning resources such as workbooks pitched at the right levels, and the provision of time and space to complete workbooks, but also the informal learning opportunities available through someone always being close to advise the learner/worker in unfamiliar situations.



## Case study 2

### Case study 2: The builder

## Introducing Boeing Builders

James Boeing has been a builder since leaving school and has been self-employed for 28 years, employing apprentices for 25 of those years. He is “off the tools” now, using his time co-ordinating the work of his employees. The company is known for the quality of its work, with most of its work coming through two architects. The culture of the firm is one of pride in workmanship, of care and attention to detail to all work—be it “background” or “finished work”—and attention to clients’ needs.

James currently employs six building staff. Four of these are qualified carpenters, two are apprentices—one nearing the end of his “time”, while the other is new and is three months into his apprenticeship. James’s business was larger, but he has recently reduced the business down to six workers because, as he says, “I wanted more time for me—more time to go to the beach house”.

### Workplace culture: Quality in standards

The learning culture fits well with workplace norms that value high standards. Apprentices are taken on partly because of a sense of responsibility to the industry to contribute to the training of the next generation of builders. As James states, “The industry cannot move on without them”. Apprentices are valued both for their potential contribution to the industry and their value to the firm.

Apprentices who appear likely to meet the company’s high expectations are found primarily through word of mouth. James seeks attributes of punctuality and good appearance as well as evidence of good school and employment records. Once in employment, the apprentices are expected to work to James’s standards. They are continually reminded that the general rule is to think about what they would like in their own house. As James states, “If it is not good enough for that, it is not good enough for the client. It’s about high quality and no shortcuts”.

### Workplace learning structure

Learning is on the job. The learning both apprentices are doing on the job formally contributes to the National Certificate (Level 4) in Carpentry (the industry-recognised “trade” certificate). The competency standards of the National Certificate are periodically assessed and signed off by James for the practical component and by the ITO assessor for the theory component. The new apprentice completed most of his theory unit standards in a pre-trade course he completed at the local polytechnic prior to his apprenticeship. The older apprentice in contrast is learning all his theory papers on the job as he finds that he cannot learn formally at night classes, he finds night classes too hard to attend because he has a young family and (relatedly) because he is reluctant to pay the costs of night class attendance. He is currently behind in completing his theory papers relative to his term of apprenticeship, but is getting both a hurry-up and encouragement from James to complete these.

The nature of the work on the building sites is structured so that no one person is doing the same thing all the time. Whilst an apprentice may spend some days solely attaching cladding to a house, he knows that this is part of “being a builder”, and that other building tasks both preceded and will follow the current one, thus there are ongoing opportunities to learn a full range of skills.

### Structured learning experiences

James has used this pattern of timing, the terms of apprenticeship (one just beginning his time with the other nearing the completion of his time), for a number of years. There are advantages both to an employer and to the apprentices as learners. Because at any stage in building work there are different degrees of complexity in skill required, the work can be apportioned to fit the learning levels of the apprentices. Thus the workplace learning that is occurring fits well with the current skill levels of apprentices.

Oliver, the younger apprentice, is primarily engaged with tasks that less complex and he is closely supervised. James’s teaching approach for relatively simple tasks, such as putting up external cladding or gib board, is to “show, watch and try”. For such tasks, Oliver will observe the experienced person model the task (usually the qualified carpenter, but sometimes the older apprentice), then try it himself under supervision until both are comfortable with “how” to do the task. Most of these tasks have elements that are quite routine, but will also contain non-routine, problem-solving elements. Oliver, for instance, was given the responsibility for installing the bulk of the cladding on a recent job. He says he is really learning on the job “when [I am] asked to do tricky things, [I try] to figure out how to do the task correctly, then by doing it over on another occasion”. The recent cladding work he had done pleased him. As Oliver said, “[there were] some complicated bits and the finish looked good”.

In contrast, the more experienced apprentice is expected to work more autonomously, modelling the practices of James and the other qualified carpenters. Jack, for instance, was engaged in finishing work putting up architraves. He was not told or shown how to do this task, rather he was reminded by James to be observant about aspects of the finished job that would indicate that the job was completed to a high standard. Having clarified what the finished standard should look like, Jack was left to complete the job unsupervised. Jack enjoyed this challenge, stating that for him “a big part of learning is remembering to put parts of what [I have] learnt into some other task” (i.e., transfer of learning).

### Guided learning

To learn how to do more complex activities that use a range of skills, the learning occurs in a guided manner. An example of this guided learning was observed with Oliver learning how to “take the level”—that is, to establish a mark around the exterior of a building frame that was at the same level. James outlined the overall planned activity to Oliver. He did not tell Oliver how to go about doing the job, rather, through questioning, forced Oliver to articulate that he knew how to do the job and why. On the basis of this discussion, James offered tips. On completion of the job a formative assessment occurred where errors in practice were identified that needed to be worked upon.

It would seem that what is happening here is what Billett (2001a) calls direct guidance. That is, James, who in Oliver’s eyes is a credible expert, is pressing Oliver into doing the thinking and acting. James, rather than telling, is questioning, giving Oliver access to information, and forcing Oliver to think. By having to construct and articulate this knowledge through this interaction with James, Oliver is learning.

## Community of practice

With the varied nature of building jobs, the context in which learned skills are applied continually changes. James has a lot of experience, but still takes a consultative approach with his qualified builders when problems present themselves. The apprentices normally do not participate in these discussions, but are close by and do listen and watch the discussions closely. For example, in a problem with setting levels for steps, Oliver listened closely to the discussion between James and his carpenter because the carpenter had a particular solution that he was arguing for. The new knowledge Oliver was learning in this situation was gained indirectly through listening and observing experts share knowledge.

This learning through participation in problem-solving amongst experts extends to the experienced workers. In the situation above, the qualified carpenter was noticeably pleased with himself for having proposed a solution that was accepted by James, despite James's initial scepticism.

## Access to wider networks

James belongs to the Master Builders Federation. One of the advantages of belonging to this association is access to ongoing information on new building materials and on changes to building standards and regulations. Following this, when the opportunity or need arises, visits to factories producing new materials are arranged for all his employees, or product representatives are organised to give demonstrations, or council officers to give advice on regulations.

## Monitoring formal learning progress

James regularly monitors the learning progress of the apprentices every three to four months. This monitoring is assisted by the "record of work" book provided by the ITO as part of the apprenticeship resource, and by the learning plan agreed to with the ITO workplace assessor and James. In the record of work book, apprentices are expected to evidence building work done, what they did and why, and link this to the unit standards required to meet the building qualification. James monitors progress by periodically taking the apprentice aside outside of work hours and going through the record of work book with the apprentice. James is very familiar with the unit standards as he is an accredited assessor as well as a judge in the annual Apprentice of the Year competition. Three processes go on with the monitoring. First, James is continually making suggestions linking the recent evidenced work with unit standards if the apprentice has missed the connection, or to ensure that evidenced work is adequate—for instance, in more complete descriptions of work done or use of photographs. Second, James is continually checking with the apprentice whether, with the evidence presented, the unit standard has actually been reached. If James is unsure that the standard has been reached, particularly if the apprentice has spent some time doing that work, James communicates this to the apprentice and promises to take some steps to improve the learning going on. Third, James is identifying gaps in the record of work, and plans with the apprentice where future work could be used as evidence towards unit standard competency.

The apprentices are supplied with diaries. These diaries are expected to support learning in a number of ways. First, to record what actual work was done each day, so that when the apprentice was working

on his record or work book, he had reference to the type of work (and learning done), and details of the job—where, when, how long. Second, the diary serves as an "organiser". James modelled the use of his diary as an organiser continually in his work, noting details of discussions with clients, times and dates of meetings etc. The apprentices were noticed using their diaries in similar ways—for instance, in noting down suggestions for "writing up" their record of work.

The apprentices are not expected to hold all building knowledge in their heads. This particularly applies to "what" type knowledge—for instance, fixing distances and measurements for gib board and cladding. Resources holding this knowledge are always ready to hand—for instance, each apprentice keeps a "gib book" in their toolkit, and knows where to go to "look things up" if they are unsure.

James keeps a close watch on the work apprentices are doing so that he is reasonably sure of the competencies they have and the gaps they have relative to their term as apprentices. The spending of time going over the record of work reinforces joint knowledge of progress in the learning. James praises progress in writing up learning and of units covered that he is satisfied with, and points to areas of work where learning did occur but has not been written up. This process of going over the record of work appears important because apprentices "are prone to being lazy", in not regularly reflecting on their learning at work and in writing this up. Thus the event of reviewing the record of work serves, to a degree, to remind the apprentices that they are learning while at work, that it needs to be written up to evidence competency and to be more conscious of this fact. Time spent going over the record of work also provides an opportunity



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for James to suggest where in upcoming jobs further units on the NZQF might be covered. In this, James seems to be guided both by where the apprentice is at, as evidenced by the record of work book, and by his sense about what new tasks the apprentice is capable of.

The record of work book provides a focus for the apprentices to identify the formal stage in their learning they are at and for identifying what formal learning recording they need to be thinking about in future work jobs. The process of reviewing the record of work with James serves to engage the apprentices with the goals of completing units on the NZQF.

### Modelling norms

Building worksites contain many hazards. The culture of the workplace, for instance, is that everyone is expected to maintain tidy work habits and tidy work spaces and thus model this care for oneself and one's workmates. Health and safety are high on James's mind in his heavy insistence on apprentices knowing their "theory"; for instance, knowing "why" power tools are used in particular ways, and "why" different substances such as adhesives are used for particular purposes or in particular locations. James will not allow any "practical" learning to be signed off as a learnt unit standard unless the accompanying "theory" has already been completed.

### Conclusion: The role of the credible guide to learners in a community of practice

The relationship between the learners and experts in this workplace was in the tradition of apprentice to master. This form of work/learning relationship has been well investigated by Lave and Wenger (see discussion in Section 2) whereby apprentices are understood as

legitimate participants in a community of practice. Knowledge in this conception is not so much bound up in artefacts, manuals and tools or even in individuals' heads, rather it is more bound up in the practices of the experts. The role of the learner in this conception is to learn these practices, that is, how to be the expert, rather than to learn a predefined amount of knowledge.

What we learned in this worksite was the close correspondence between this theoretical conception of the apprentice learning how to be a core member of a community of practice, and actual practice. Learning is done on the job. New apprentices are shown how to do tasks by the qualified tradesmen, then doing the tasks to build competence. As competence builds, the tasks become more complex and the apprentice is given more autonomy in determining how tasks are done, mirroring in effect how to be a qualified tradesman.

We noticed how well the apprentices were guided by the experts, particularly the owner, James. In particular, in his teaching strategy, prior to undertaking tasks, James encouraged the apprentices to articulate what they knew, how they planned to go about doing the job and to ask questions about things they were unsure of. If important aspects of doing the job did not come out of this discussion, rather than being told, James would prompt the apprentice to think that aspect through and articulate it. "Doing the job" was thus always explicitly also recognised as a learning event. This emphasis on learning was reinforced in a summative sense by James continually advising the apprentices where learning on the job fitted with the unit standard competencies in the framework of building qualification.



### Case study 3: The swimming pool

## Introducing the pool

Splash Garden provides a range of public swimming services and related facilities such as pools, swimming lessons, sauna, cafe, childcare and fitness centre. It is one of a group of leisure centres founded in 2007 and operated by Community Company, a business unit within the city council. There is a commitment to being accessible to the community by ensuring free pool access, and other services (e.g. swimming lessons, pool programmes, fitness memberships) which are relevant, affordable and appreciated by customers.

### Workplace members and research participants

Splash Garden has 16 full-time permanent staff all year round and adds another 20 full-time staff for each summer season.

We interviewed three trainers, the manager, three experienced workers who had gained a Level 3 qualification through Splash Garden, and eight new workers beginning their training towards a Level 3 qualification. We observed a training session with 24 trainees on the fourth day of their 10-day training programme.

### Workplace learning structure

The seasonal staff undertake a Seasonal Lifeguard Training programme to prepare them for work as lifeguards at one of the community pool facilities over the summer period. The training helps them to gain a National Pool Lifeguard Award and, with the addition of the on-job training they undertake once they are working, they can also gain the National Certificate Community Recreation (Aquatics) Level 3. The training programme ensures trainees have skills in first aid, health and safety, lifeguard work, and customer service. The National Certificate recognises the skills and knowledge required for leading aquatic recreation programmes, activities or facilities in the community. The training is specified in seasonal employment contracts (November to end of March each year) and trainees are paid as employees while they undertake the training.

The first day of the programme begins with a full powhiri (welcome) at the head office of the organisation and moves into an orientation to the organisation, during which the organisation's values, its strategic objectives and expectations of seasonal lifeguards are presented in segments by a range of different managers and executive staff. After this the programme operates at Splash Garden and covers areas such as lifeguard roles and responsibilities, health and safety/first aid, customer needs and lifeguard procedures and actions conducted by a range of different trainers from across the organisation, often in twos or threes.

The training takes the form of a short course (15 days of eight hours per day) which takes place over a three-week period. The length, structure and content of the programme was reviewed in the wake of a drowning at a contracted school pool operated by Splash Garden over the summer in the early 2000s. Analysis of the drowning and events leading up to it highlighted a need for more training in customer service in aquatic environments, water safety awareness, injury prevention, and emergency response. This required an extended training time from the previous

three days to the current 15 days. The manager reports that nearly every trainee that completes the training programme goes on to achieve the lifeguard qualification, with high numbers of trainees also completing the National Certificate Level. Some staff may become permanent, formally applying for positions as they are advertised.

Permanent or returning seasonal lifeguard staff may undertake training towards other qualifications such as a Level 3 or Level 4 National Certificate in Community Recreation (Aquatics) and Level 2 National Certificate in Business Administration and Computing. Some have also completed training in first line management.

Short refresher courses are held every two years for components of the National Lifeguard award on health and safety, first aid and practical lifeguard activities to ensure all Aquatics staff have current qualifications. All staff do refresher in-house training on cardiopulmonary resuscitation (CPR) and defibrillator use on a monthly basis. They also do scenario-based training for one or two hours every week.

### Learning culture

#### Each one, teach one

There is a culture of learning and continuous improvement throughout the entire organisation and also in the Splash Garden workplace. Performance reviews for staff are conducted regularly and include development of individual performance plans which identify skill and competency gaps and how these will be addressed with further on-job training.

Thomas, a trainer and assessor, describes his own progression from being an unsuccessful learner at school, to lifeguard training, to a permanent position on the staff as being about an attitude of openness to learning, supported by the organisation: "You teach me, I teach someone else, and then it sticks." In this way, the Splash Garden context suggests the concept of *ako* (the Māori pedagogical concept encompassing both teaching and learning) and the Latin maxim "Qui docet, discit" (He who teaches, learns). Daniel, one of the experienced lifeguards who returns to work at the pool each summer season, believes his own training for a Level 3 National Certificate was helped greatly by other experienced lifeguards who had been there before him having a training role at times during the programme. The manager cites this—that trainers are "staff who have been in the same situation as trainees" as a key factor in the success of the training programme.

Thomas, the trainer, also teaches swimming programmes and supervises other swimming tutors. He has had wider professional development



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in the pedagogy of swimming instruction, on working with people with disabilities that impact on their ability to swim, and on working with people for whom English is not a first language. He describes his theory of learning as being about showing learners respect first, then expecting the same in return. Experience has taught him to be less casual with learners in order to underline his authority as the teacher and that “short and sweet” bursts of teaching, interspersed with time to practise before moving on, are most effective—in other words, “theory and practice are woven together”.

Another trainer, Charlie, describes starting as a seasonal worker eight years ago before becoming a full-time lifeguard and trainer, after a team leader noticed his proactive approach to the work and eagerness to learn, and ensured he had further opportunities. While there is no financial reward for being a trainer, he says it does make the work more varied and interesting.

There is also a buddy system operating during the three on-site days spread throughout the training programme. Trainees can take this opportunity to ask questions of more experienced workers. This is also a way that experienced workers can practise and refine what they do and demonstrate any interest in further training themselves.

### Working together and protecting lives

Part of the learning culture is also about more effective ways to get the job done. For Thomas the trainer, this means seeking, and acting on, feedback from learners. He also tries to focus on team-building and communication skills with learners so they learn to think for themselves and problem-solve together. Current trainees also reported appreciating the learning culture modelled by trainers and other staff, and practised through group work. One trainee, Grace, describes it as a surprise, especially in comparison to another lifeguard training course she had done previously: “No-one has ever asked us what we think before now!” Several others also reported enjoying the group discussions, the opportunities to give feedback and that trainers constantly checked for their understanding rather than settling only for the correct answers.

Mia describes being “all as one, trying to help each other. We feel like a family. Jayden [a trainer] explains stuff rather than just giving out hand-

outs. He checks everyone is okay with it. He gives everyone a chance to ask questions. The group work and scenarios mean there is no right or wrong ways of doing things, just [how we work it out together].” A number of trainees reported to us that they found the course hard, particularly in terms of the physical demands. Others reported struggling with literacy and numeracy and the mental demands of having to take in and understand a lot of information. However, they also felt supported to meet those challenges through the nature of the friendly trainer–trainee relationships and the structure of the course in mixing up the theory and practice modules so that nobody got lost or left behind for any length of time.

The nature of the work at Splash Garden means lifeguards must work positively and co-operatively. The lifeguard training emphasises a particular approach to teamwork. On the one hand it allows workers to share in the fun aspect of their work as customers enjoy structured and unstructured leisure programmes at the centre. This sense of fun and camaraderie within the team and out across to the customers was evident in the comments made in interviews. “I love my work so much, I like to come in on my days off to see my friends”, said one worker. Others referred to social relationships with colleagues and the fun they had together both in and out of work. Several new trainees explained that part of the course’s attraction was to meet new people and create new relationships. This seemed particularly true for those who were “starting over” after major life disappointments (e.g. experiencing unemployment, serving a prison term, leaving school without qualifications or a clear direction).

The teamwork approach also highlights the gravity of lifeguard duties. As one experienced worker said, “It’s about being proactive, preventing things before they happen. And then acting if there is an incident. The team for each shift decides who is going to deal with specific issues. It’s 99 percent prevention and 1 percent dealing with anything that actually happens”. The customer service relationships are therefore also critical—as Mathew, a new trainee, told us, “You really need to be easy going and laid-back to get on here. You need to be a people person here. There’s a lot of customer service”. The relationships with customers *and* the relationships within the team that support customer service are therefore paramount.

The teamwork manifests in scenario-based training exercises that trainees told us often featured repetitive physical skills. One permanent lifeguard described its usefulness in teaching people to automatically think and work as a coherent unit: “You can do what you need to do without having to think”. “Being part of an effective team”, as he described it, was a key attraction for other workers too. One new trainee explained that seeing the commitment of other workers inspired her commitment and she said, “It’s knowing that we are going to be part of something big—saving lives [that makes me feel committed]”. Other trainees reported noticing the way that experienced workers and trainers, as well as new trainees, all encouraged each other.



## A community workforce

As a community-focused workplace, Splash Garden and its other worksites at Community Company tend to employ people from the local community. Community Company prioritises serving its own particular community, rather than trying to appeal to mainstream groups or communities outside of its locality. Given that the local community overall has higher rates of unemployment, poorer health and lower qualification rates than many other urban centres, the employees often have first-hand experience of some of the issues facing their customers, and a sense of loyalty and sensitivity to their community. Some of the employees have completed other training programmes which target long-term unemployed people or people with low skills or no qualifications. Several of the trainees and experienced workers we interviewed had completed six-week New Zealand Defence Force-run Limited Service Volunteer (LSV) training programmes following referral from Work and Income New Zealand (WINZ) or other short-term courses at Private Training Establishments (PTEs) and/or with Youth Training grants. Employees' experiences, together with their training, are a strength of the workplace in its ability to work for its community. Employees identify with the community and relish the opportunity to play an important role in it. As one new trainee put it, "It's a really important task to keep the community safe". Several other trainees and experienced workers described their own or their family's pride over their having "come a long way" or being able to "think about tomorrow instead of living for just today" by becoming part of a valued work team. Several mentioned appreciating that trainers "give everyone a chance".

Each employee has an Individual Personal Plan as part of their employment contract. This specifies their interests and aspirations and a training plan negotiated with the company. One typical career track within the organisation is to begin as a seasonal lifeguard, become a permanent seasonal or year-round lifeguard and take up a senior position in lifeguarding which includes training and supervision roles. These positions may occur within the Splash Garden workplace or at other worksites within the organisation. Several of the seasonal staff we interviewed were hoping to gain permanent positions as they enjoyed encouraging, and caring for, customers at the pool and very much enjoyed working in their teams.

A long-term permanent full-time career with the organisation is not the only career pathway. One of the people we interviewed had a long-term commitment to several different seasonal jobs around the world, including his lifeguard work. Although he currently did not have the ideal balance of seasonality and permanency that he desired, he appreciates having options for ongoing learning and work at the pool. Other workers were enthusiastic about their work at the pool and saw it contributing to different longer-term career aspirations. It seems that there is space at the organisation for a number of different levels and types of career commitment.

## Teaching strategy and approach

The overall training programme is set out in a workbook given to all new trainees. Sessions are alternately theoretical (learning principles, using workbooks, holding discussions) and practical (working in the pool). They are all group- or class-based. All trainees are able to see the outlines of each session, expected learning outcomes and details of scheduled practical and written tests where applicable in advance. Their workbook contains an evaluation form on each presenter and a session enabling trainees to give anonymous feedback to training staff at the end of the training programme.

We observed a class that began with friendly banter and a roll call, where the room was organised with learners at tables in rows and the teacher standing at the front. A whiteboard showed the unit standards being introduced in the session.

The Splash Garden approach seems to follow on from the very supportive one taken by the Corporate Academy Group (CAG), a PTE which trains young people with few or no school qualifications and "a distrust of learning, and a scepticism that they will achieve". CAG courses have a significant literacy and numeracy component and aim to have students holding their heads high on graduation day, with "a pride so real that many weep" (Corporate Academy Group, 2010). CAG refers some of its graduates to Splash Garden (16 of the 26 trainees we observed had previously done some lifeguard training there). Splash Garden's approach



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also builds on CAG's support through use of a reader/writer in cases where trainees might struggle to provide written answers for assessments in workbooks. As a result of previous training experience and the support given to trainees, trainers report that few trainees drop out of the course. Because the trainers have been trainees themselves, and are from similar backgrounds to the current trainees, they relate well to the students. Jayden reports making a particular effort to create a relaxed atmosphere as he believes that enables people to learn. Mathew liked the mode of teaching—"they're straight-up about things".

The experienced workers we interviewed particularly liked the use of scenarios in their training, describing it as "like the real-life situations you get" and "you can problem-solve typical incidents" (the current trainees we interviewed were not yet at that stage of the training programme). The new trainees and experienced workers enjoy the mix of theoretical and practical aspects in the training programme, particularly bringing theory to life through scenarios and role plays. A trainer, Charlie, points out that scenario-based training also allows trainers to spot the best candidates.

Overall, the teaching was well-attuned to needs of learners. It was very focused and well-aligned to what would be needed for them to do their work effectively. Notable was the use and modelling of feedback. This included the trainer asking for feedback about the afternoon session in the pool on the previous day, and being very accepting of such feedback, pointing out that they are the learners and are the best placed to know what was helpful or what could be improved. He did not feel compelled to comment on the details of the feedback; he just said "Cool". The tutor

also gave really positive feedback to the group about the way they had worked the day before. He also reinforced expectations: "A good effort yesterday. Keep the fitness up—even when you have got your Certificates we'll expect the same effort. Hopefully you are taking the theory in".

### **Conclusion: "Each one, teach one", teaching and learning strategies in formal training**

On the surface, the training programme at Splash Garden reflected the 'learning by acquisition' paradigm. Thus there was an assumed body of knowledge codified in workbooks that was expected to be internalised by individuals through instruction, and tested by summative assessment through workbook completion: "Remember this, it'll be in your test".

Practices below the surface, however, demonstrated a mix of learning by acquisition with learning by participation. Whilst there was a large body of knowledge that individuals were expected to have cognitively processed, the context in which this knowledge was learned was social and participatory. The various backgrounds of the instructors had led them to understand the social space most of the learners were in (most had unsuccessful learning episodes in the past), thus there was a culture of respect for the learners, with pacing of instruction to the abilities of all learners and continually checking their learning through questioning. These practices motivated the learners to acquire the knowledge. Instruction was also backed up with practice, particularly in groups—what was taught through instruction was learned through participation.



## Case study 4: The landscaper

### Introducing Dig This

Dig This is a small landscaping business located in a provincial town. George the owner has been in the landscaping business for many years, entering as a subcontractor to a paving business. George “graduated” into Level 4 landscaping certification some seven years ago through the Recognition of Prior Learning (RPL) process. Prior to taking on his first apprentice, George trained as a workplace assessor. His business is well-known locally for producing innovative, quality landscaping. George has family in the town and is well-known locally, thus a “reputation effect” is important for his business because word gets around as to whom one goes to for good-quality work.

In addition to the responsibilities of ownership, George remains “on the tools”, that is, he actively participates in the activities of landscaping. He employs two landscapers; one is a leading hand, and the other is an apprentice. Prior to our visit George had two apprentices, but one had finished his apprenticeship and had moved on to another employer in another town. This latter apprentice had achieved national recognition as Young Landscaper of the Year and Young Horticulturalist of the Year.

### Workplace learning structure

Learning at Dig This is very much learning by doing and the learning structure reflects this. What the apprentices need to formally learn to qualify as a landscaper is codified in the unit structure of the Level 4 National Certificate in Horticulture (Landscaping) (Advanced). This apprenticeship has been designed to be completed over a three-year period, but completion is based on competencies achieved rather than on time served. A training plan is developed between George, the apprentice and the HortITO training adviser as a condition of the apprenticeship. George, as the registered workplace assessor, has the responsibility of assessing whether the apprentice has met the competencies defined in the unit framework of the National Certificate. Harry, the training advisor with the ITO, is key to the continued progress of the apprentices. He visits the apprentices onsite, keeps them on track with their assessments, is continually looking at jobs for their positive learning and assessment elements and keeps all the paperwork up to date.

Aside from the development of competencies through learning by doing, George is active in sending his apprentices offsite to training workshops organised through the ITO. This occurs whether or not the apprentice needs the training. As George stated:

**In addition to learning what is on offer the apprentices can compare their skills with other apprentices at their level. This gives them a lot of confidence in their work and their learning. The apprentices also get to know others in the industry at the training days and it gives them the opportunity to talk with others about their experiences with different aspects of learning and work.**

Michael, the younger apprentice, reinforced this, stating that block courses were good “for measuring yourself to see where you are at, and to pick up new knowledge”. In addition, if the apprentice shows an interest in particular skills that his team does not hold, George will organise training with someone in the industry with those skills. George, for instance, because he did not have the skills, described sending one of the apprentices to a rose grower in order to learn how to prune roses

correctly. These opportunities for apprentices to engage with others in the industry, either at their own level or with experts, is suggested as a component of a successful learning environment.

### Learning through doing

The nature of landscaping work, as described above, incorporates both the “hard” side of shaping the landscape and structures and the “soft” side of plantings, with both brought together in a design that meets the client’s expectations. This leads to “no job being the same as another”.

This context of “no job being the same as another” requires landscapers to draw upon a high degree of content knowledge as each new job is planned and executed. There is thus a potentially rich ‘learning at work’ environment because of this requirement to continually draw on knowledge in order to solve site-specific problems. There are a number of aspects of the relations at Dig This which suggest that it is a rich learning environment for the apprentices in particular.

### Apprentices feel valued and safe

This workplace has a distinctive community of practice whereby, whenever work is being planned, discussion takes place between the peers in order to achieve consensus as to how to progress. Apprentices feed off this discussion as knowledge is brought to light, and are invited to contribute (as George says, “they often have a fair point to make”) and feel part of the work team. Michael, the younger apprentice, described the workgroup as “tight”, and acknowledged the particular strengths his seniors brought to these discussions—“Everyone played a role; David the encyclopaedia, Jesse old school, George the design mind, all open to different things and with different brains to pick”. Harry, the ITO training adviser, reflected how “everyone respected one another”. All work was shared. As Michael, the younger apprentice, noted, “everyone knew what was going on, and I was never the only one doing the shitty tasks”.

Those with knowledge respected the apprentices. Harry, was described as “always even-tempered, who doesn’t ‘shout down’ apprentices and is always approachable”. Michael, the younger apprentice, respected the ITO training adviser, describing him as “very cool, talked to you like a mate and always in there—not standing off and doing nothing, especially at block courses”. From Michael’s perspective his peers were credible teachers.

All the team share similar work values and this seems to aid the trust and respect each member of the Dig This team have for one another. George



## Case study 4

looks for enthusiasm for the industry, a liking for working outdoors and a good work ethic as attributes in the apprentices he takes on. These attributes are reflected in the apprentices. Michael, for instance, described liking graphics at school where landscaping applications were his favourite, and the big influence of his father “to get a trade”. Michael knew what he was good at and what he would like to do on leaving school and was very keen to learn a trade in the landscaping industry. He thinks this keenness may have helped him gain a landscaping apprenticeship.

### Apprentices get opportunities to practise transferable skills

Whilst each landscape job has its own, unique context, there are basic transferable skills—such as installing drainage systems, concrete, brick and block work and laying materials on hard surfaces—which are drawn upon in each job. Apprentices need the opportunity to refine these skills and this is part of the practice at Dig This. George believes that apprentices need “time on the tools”—to give them enough time to learn skills and not be pushed into completing formal assessment. As part of this practice George believes that the apprentices learn best on the job when they have to solve things for themselves but are confident they have the skills to do the job. As George states, “I give the apprentices enough rope as I know what level they are at—whether they know enough to do a job”. George was critical of polytechnic-trained apprentices for not getting enough opportunities to practise skills. The apprentices value being given this rope. Michael describes his preference for “getting hands-on experience rather than being told what to do”, and related how he valued being left alone to screen a path which he had not done himself before, a job which “came off sweet”.

### Trainers look for learning moments

Michael, the younger apprentice, described with his learning that “bookwork was always a problem—it never stuck in my mind”. Such a learning style may be common with apprentices—they prefer to learn by doing. However, this learning style creates a problem with identifying what apprentices know or do not know. George overcomes this by asking questions such as “Do you feel comfortable doing this?” and “Why don’t you feel comfortable doing this?” His overall manner is one which gives the apprentices confidence in articulating what they know and what they do not know. As Harry, the ITO trainer states, “[George’s] manner of communication and work instills confidence in the boys—they always feel encouraged to speak up and say what they feel or think about a matter”.

If gaps in apprentice knowledge which cannot be learned through practice are identified, George’s approach is to encourage the apprentices to search out the answers for themselves.

George relates how he is continually looking at jobs for their learning elements. He knows where the apprentices are at with their formal learning. Assessment for this formal learning is kept in the background and completed on the basis of the landscaping activity done and evidenced in their workbooks. Harry recognises that apprentices often need to be made aware that the work activity they are doing is contributing to units in their qualification, and that this awareness-raising “was a task done well by George”.

### Pedagogy

There are a number of teaching strategies embedded in learning by doing which are employed by George to aid learning in this workplace. The learning at work corresponds to the learner’s level with sufficient challenge to motivate learning. This is characterised by George “giving the apprentices sufficient rope” to do things themselves in the knowledge they have the basic competencies to do the work.

The ‘community of practice’ approach to solving new challenges brings forth knowledge from the seniors which can be shared with the apprentices. The apprentices, because they are respected, feel part of this community of practice, even as learners. The two apprentices were described by Harry the ITO adviser as always working together. This practice of effectively buddying a senior apprentice with a junior apprentice within this community of practice amplifies the sharing of knowledge and expertise as the senior apprentice knows better than the experts what the junior apprentice is experiencing.

All work is shared, so there is a variety of activities and experiences for the apprentices to build and refine their skills. The practice of leaving an apprentice to complete a transferable task on his own provides the apprentice with the opportunity to practise and refine these transferable skills.

The unit framework, the learning plan, the workbook evidencing and the assessment and continual monitoring of formal learning progress provide a structure and processes to engage learners in progressing through the formal recognition of their learning.

Actively involving the apprentices in block courses exposes the apprentices to the knowledge of experts outside their own work group. It also helps to motivate the apprentices because they can “see where they are at” compared to other apprentices at their level.

### Conclusion: Learning through belonging to a community of practice

As with the builder case study, learners at Dig This were apprentices and learned on the job. There are a lot of similarities in the learning principles between these two workplaces. What was more prominent in this workplace compared to the building case study were the practices that made the apprentices feel that they were part of a community of practice, albeit while still learning the practices to be a landscaper.

This was particularly evident in the collective nature of decision-making into how to do particular jobs. Everyone, including the apprentices, was encouraged to have their say and express their opinion. It was clear here that knowledge was understood as dispersed and needing to be shared. Each person, including the apprentices, had acquired sets of practices and attributes that made them more expert in some areas than others: “David the encyclopaedia, Jesse old school, George the design mind”. By participating, the apprentices fed off this dispersed knowledge.



## Case study 5: The tourism provider

### Introducing Mount Victoria Skifield

The Mount Victoria Skifield is one of a number of skifields owned by Snow Time, whose shareholding is largely made up of other local tourism operators. Aside from a small number of permanent infrastructure personnel, the workforce is seasonal and rehired each snow season. At its peak the skifield has upwards of 600 people in its employment. Most of the work done, such as serving in the restaurant, working in the kitchens, attending to ski hire, retail, ticketing and traffic management, is by “front-line” staff and requires relatively little skill. Other roles such as chair-lift operators, snow groomers, mechanics and the like, require some skill and have considerable responsibility for visitor safety. A small number of jobs require a high degree of skill and a high degree of responsibility for visitor safety. These include snowsports instructors and the ski-patrol staff.

Snow Time is in strong competition with other skifield and tourism operators to attract people (primarily from Australia<sup>11</sup>) to their skifields. Because of this strong competition, the company wishes to offer visitors to the skifield a “world-class snow experience” so that they will return and encourage others to visit. In addition to enjoying great facilities, the ability of visitors to have this world-class snow experience very much rests upon the service they receive from skifield staff. Workplace learning at the skifield is thus very much oriented towards all staff (particularly those less-skilled staff) aligning with the service-oriented values of the company and reflecting these values in the quality of their work.

#### Workplace learning structure

Workplace learning at Mount Victoria is very structured to meet the needs of the organisation, but at the same time is sufficiently flexible to open pathways for subsequent individual learning needs.

For front-line staff, the training structure comprises:

- on initial employment: one week’s orientation, followed by being buddied by a senior in the department they are assigned to
- during the first season: to complete a Level 3 National Certificate in Tourism
- in subsequent return seasons: work towards national certification in a department speciality; for example, a National Certificate in Hospitality, or a National Certificate in Business (First-Line Management). This latter Certificate can be subsequently staircased into a Bachelor in Applied Management
- for specialist staff providing snowsports instruction or ski-patrolling duties: individual ongoing training programmes developing snowsports skills and/or instructor skills.

The company has trained staff, even before industry training days. Early alliance with the then ITO, SFRITO, was of benefit to the company in being able to extend the breadth of training, especially in the front-line area, and enabled the company to more fully develop training materials and resources such as training manuals for use within the company. Subsequently, in the environment with the rebranded ITO, Skills Active, resources to support learning have expanded. The company’s leadership team has now been formally trained and responsibility for determining training needs has been delegated to this level. The HR manager

organises the training at the company. His role, he explains, is “to lead the way and build the training framework and create training pathways and opportunities for people”. He delivers some training himself, particularly in the management area. He spends a lot of time with the team leaders, both to ascertain how the workers are getting on with their training, and to collect feedback on past and potential training initiatives.

This formal/informal interaction with team leaders proved successful in establishing a training culture with front-line staff. Initially, as the HR manager explained, with front-line staff there was “no platform” upon which to start training. They began by “first delivering small training ideas, then as the staff began to be better engaged about training, courses based on staff training needs were identified and delivered”. This has gradually developed until now where the Certificate in Tourism provides the basic “training platform” for front-line staff.

A training manager co-ordinates actual training and assessment. She is in frequent contact with department heads. Most department heads are qualified assessors registered with the relevant ITO. With the department heads, the training manager identifies the progress of staff assessment, and liaises with the ITOs to ensure the assessment paperwork is done.

#### Motivating staff to learn

Seasonal work in the skifields particularly attracts those whose passion is to ski. Most of those attracted to the relatively low-skilled jobs on the skifield are young, have no responsibilities such as family, aren’t yet ready to think about “a regular job”, often are well educated and have well-to-do parents (who introduced them to snowsports), like to travel and to party, who want to experience everything they can and think about their own needs and what they can get from life for themselves. These young people appreciate the experiences they are offered; however, such experiences are often framed around what is “in it for them”. The advantage of this work to these young people is ready access to a skifield and a season’s skifield pass as part of the employment package. Seasonality in work is not a problem, as they can move to northern hemisphere skifields when the southern hemisphere ski season closes, or find other seasonal work in the southern hemisphere. Ultimately, for most of these workers, this lifestyle becomes unsustainable because the income is insufficient to cover the expenses of living in what are expensive locations, because of cramped accommodation (to save on costs) and because they “mature” and want to move on to other things in their life.

The problem for the company in employing these young people is to make employment sufficiently attractive so that they will reliably turn up for work and be attentive to the customers in their work, instead of doing snowsports (which is the real reason why they are there). This problem is addressed in large part through selection and then the training and learning programmes offered by the company. As Edward, the skifield manager, put it, “We want confident, competent staff. We hire for attitude then train for skill.” In order to maximise the benefits of such training and minimise costs, the company also aims to attract, as the majority of its pool of current seasonal employees, those who were employed by the company in the previous and earlier seasons. Attracting these young people back is a problem as well since, with the seasonal nature of the work and the mobility of the young people concerned, the seasonal workers all disappear for a long time. So, in addition to motivating these young people to be service-centred in their work, the company has to go the extra step of actually getting them back after a break. The company aims to “be the employer of choice”, with the

11. An opinion offered was that Snow Time had not been too badly affected by the recession—in fact there may even have been an upturn—because people from Australia could not afford to go skiing in Europe and so came to New Zealand instead.

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training package offered as a significant inducement. The percentage of returning staff is a key performance indicator.

### Motivation through self-development

For front-line staff, when they are first employed and undergoing an induction course, the message they get from management is that through the training they are getting they are developing themselves and in the process developing the business. This message is transmitted from James, the CEO, down the management chain. As he states, "If people are growing and developing in the business, then they feel like they are developing for themselves and they feel they are part of the success of the company." Front-line staff are required to work through and complete by the end of the season the National Certificate in Tourism. This is a Level 3 Certificate and people doing this can be assessed for competency on the job, and achieve the qualification via a recognition of current competency process through the Skills Active ITO.

The units within this Certificate are consistent with the message of growing themselves and growing the business. Compulsory units include, for instance: identify and self-evaluate the demands of a specific role in a tourism workplace; demonstrate knowledge of communication and customer service theory in a tourism workplace; provide customer service experiences in a tourism workplace; describe the legal rights and responsibilities of employees and employers in a tourism workplace. Elective units include: design, implement and evaluate a personal development plan for a role in a tourism workplace; demonstrate verbal communication skills in a wide range of tourism contexts; demonstrate knowledge of teamwork and its importance within a workplace; and perform calculations for a tourism workplace, amongst others.

This self-development message appears to be received by learners. Joel, a first-season employee, revealed "a sense of pride at being able to do [my] job". Joel had also identified systems and processes within the company through which "I could progress under this system".

### Motivation through re-employment

A message first-year front-line staff also get from management is that to be rehired in subsequent seasons they need to have achieved the Level 3 Certificate in Tourism. Whilst those who had not completed the units were actively being reminded of such by their team leaders and the training manager, by and large, those doing the Certificate were expected to be proactive in working through the units and in getting the units assessed. The aid the qualification gives to be rehired by the company and hired elsewhere, as well as making them think about the work, seems to be the benefits front-line employees see in this qualification. For Nicholas, a first-year employee from England, the Level 3 qualification is important as "it lets me return to work at Snow Time", but also the training "makes [me] think about [my] work and is good for reflection".

### Motivation through training pathways

In second and subsequent years of employment, front-line staff have other training opportunities. They may train for a departmental certificate, such as in hospitality, snowsports and snowsport equipment, or study for a National Certificate in Business (First-Line Management). Such staff have to be proactive in seeking out these opportunities as this is consistent with the "responsibilisation" behind the company learning ethos of staff growing themselves as individuals.



Through the latter qualification, the company is also producing potential team leaders. Team leaders are critical to supporting the visitor experience-oriented culture of the organisation, because they hold the detailed institutional knowledge of service work in their particular area and are accountable for the quality of work the team undertakes. Because of the seasonal nature of the work, it is very important to the company that this institutional knowledge is continually reproduced by having a large number of team leaders return each season and by training new team leaders during each season. The attributes the company seeks in potential team leaders are: a good work ethic, a willingness to show initiative and a liking for working with people. The First-Line Management Certificate is designed for people who aspire to a team leader or supervisor role. It is offered at Levels 3 and 4 and structured in three modules: Communication, Leading Teams and Management. It is a self-paced programme, designed to be workplace experientially-based. As they are done units are verified with a workplace-based verifier, and once believed to evidence the required standard, the units are passed to registered ITO assessors (who may be based in that workplace or employed directly by the ITO). The Level 4 Certificate can then be staircased into a Bachelor in Applied Management offered through the Otago Polytechnic.

The First-Line Management qualification is a recent training innovation for the ITO. The Certificate is viewed as an important vehicle to extend “leadership” qualities in staff, particularly those in the front-line area. There are some frustrations within the company in the Certificate’s implementation, however. These frustrations seem to lie principally in aligning the learning materials and resources with relevant and meaningful workplace experiences. The feeling within the company seems to be that the resources are too generic and not sufficiently adaptable to the company’s context. This leads to attempts to “translate” the unfamiliar learning materials into a company context, as in the training session we observed, where it appeared there was teaching going on but not much learning, as the students were not engaged. This deficiency was recognised and acknowledged as “work in progress”. In part, there was a sense of the company being out on their own in delivering this qualification, which suggests a role for the ITO to offer more direction about how to deliver something like this qualification. Teething problems notwithstanding, the Certificate in Front-line Management is seen by many front-line staff as a both a means “to help move up the ladder” and as an end in itself as “nice to achieve something”. In principle, therefore, it does serve to align the learning interests of many staff with the company goals of widening leadership in staff.

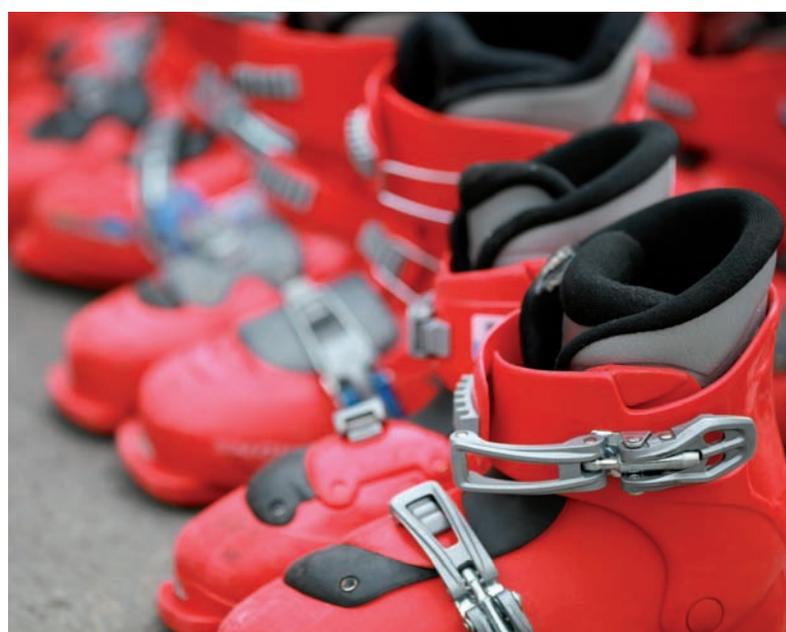
### Motivation through performance management

Training in the workplace and selection of employees for team leader or senior pathways is linked to a performance management process. There is a mid-season and end-of-season performance review for each employee. In this process each employee is rated on items relating to on the job performance, skills and the qualifications they have. These ratings and attributes are formally linked to a pay rate. More informally, the process is used to identify future leaders and talent. The understanding of this informal process is variable, from “they could make it clearer about how you progress” to a clear understanding of the process, as, for instance, noting the relevance of survey responses of guests as performance-related items.

Learning by employees in this company occurs simultaneously at a number of different levels. Staff are hired for their attitudes then trained up for the skills the company needs. For front-line staff, the Certificate in Tourism provides the basic platform for the service skills the company needs. The actual job skills to serve in the restaurant, to look after rental equipment, to work on guest services or the chair-lifts are taught on the job by team leaders or “seniors”—those staff who have experienced several years’ work in that department. Initial training is usually to show, watch and try, then to be “buddied” with a senior until basic competency to do the job is demonstrated. Subsequent learning happens “as part of the job”, guided by the more experienced workers.

### Career path options for skilled workers

There are a number of workers who, despite the seasonality of the work, have made snowsports a career. These especially include the snowsports instructors and the ski patrollers. These workers have a love for the mountains and for the services they provide, especially snowsports. They have taken a number of years to gain experience both in New Zealand and overseas, and the qualifications to hold the positions they do. Aiden, for instance, trained as a signwriter in Cambridge, New Zealand and worked whilst on OE as a ski operator in Scotland over 10 years ago, in order to be able to snowboard. Whilst there he decided he wanted to work in snowsports. Through talking to people he found an entry route by completing a course with the British Association of Ski Instruction which has a well-regarded qualification in Europe. Over the years, he worked as an instructor in different ski fields around the world, continually increasing his qualifications along the way. He is now married with children, settled in Queenstown and he commutes to Australia in the off-season where he works in his original trade as a signwriter.



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The qualifications these workers have are awarded and maintained under the New Zealand Snowsports Instructors Alliance (NZSIA). This is a well-established incorporated society, made up of members who are snowsports instructors or who wish to become snowsports instructors. The qualifications the NZSIA offers are internationally recognised by skifield operators and to the best of our knowledge are not in the NZQF, (the Skills Active Certificate is registered on the NZQF, but is not recognised internationally). The ski patrollers have additional qualifications in avalanche rescue, issued through the NZ Mountain Safety Council. Aside from some first-aid components, the certificates issued by the NZ Mountain Safety Council are not on the NZQF, but are recognised internationally.

A number of front-line staff were aware of the career pathways of snowsports instructor or ski patrol, and were “thinking about” this as a long-term option, but were generally not ready to be proactive in working towards this option. Some had, or were doing, other qualifications, such as Mountaineering or Outdoor Leadership and Management, to keep their long-term options open, even if they were unsure what they might be. Jessica, for instance, is in her first year at Snow Time, works as a lift operator and wants to learn how to snowboard. She has a varied background in outdoor activities, having completed a Diploma in Outdoor Leadership and Management, and gained work experience in rock climbing at YMCA camps and as a guide through glow-worm caves for an adventure company prior to working at Snow Time. She is not sure about her long-term career options, but sees her past and present training and work experiences as part of what she wants to be. She is currently doing a National Qualification in Mountaineering which may open up opportunities for her as a mountain guide.

Openings for the more skilled jobs such as instructor or patroller are scarce and limited to company needs. Candidates for these openings largely “self-select” themselves through their demonstrated desire (including completing formal qualifications) and ability.



### Pedagogy

As discussed above, the National Certificate in Tourism serves as the training platform for front-line staff and there are a number of social arrangements in the workplace aimed at motivating staff to take self-responsibility in the training opportunities available. The pedagogy, or the teaching and learning strategy, employed by Snow Time reflects these structures.

For front-line staff, much of the content of workplace learning is learned through doing. This begins in the orientation training where informal context-based training occurs. For instance, Emma, who works in the restaurant, recalls learning about customer service through alternating role playing “being” good or bad customers and “being” good or bad serving staff.

“Seniors”, or experienced staff, play an important role in this context-based training. New staff are buddied with a “senior” for a couple of days until that senior is satisfied that the new staff member is competent with the tasks. When a new learning situation arises, these seniors take responsibility to teach tasks. For instance, for Jessica, once her basic competency in lift operation was established, she was taught by her seniors more complex operations in anti-collision adjustments of the ski-lift and in the operation of backup generators. Similarly, Nicholas was taught by his senior how to assemble skis and he can now do this himself as he has “learnt all the bindings”.

The principal teaching strategy is thus guided instruction on the job by experienced staff. Whether the content has been learned is demonstrated by competency in the tasks done on the job.

In contrast, the strategy for formal learning (as with the Certificate in Tourism) is for the learner to take responsibility for this learning. The company (in partnership with the ITO) provides the learning infrastructure, such as workbooks, training workshops, workplace verifiers and assessors and a training co-ordinator to encourage completion, but it is ultimately the responsibility of each employee to complete the workbook sections and have the learning verified or assessed.

### Conclusion: The interplay of multiple structures and practices to motivate learning

This case study is notable for a workplace learning programme that successfully articulates the service needs of the company with quite different needs of most staff. Workplace training is used a vehicle by the company to offer a “world-class snowsports experience” to visitors (many of whom are from overseas), and to attract a transient workforce for most of whom their primary interest is ready, cheap access to participating in snowsports activity.

This articulation occurs through learning structures and practices motivating staff to learn. There is a strong ethic transmitted through the company that, through learning, the business benefits and the staff benefit themselves. The content of the formal learning supports this ethic. Re-employment practices favouring staff who have completed the basic certification reinforces this ethic. Multiple training pathways are offered to those who voice their desire to specialise in particular departments. Lastly, accumulated training and work experience are rewarded through a performance management system.

## Case study 6: The vineyard

### Introducing Fine Wine Company

Fine Wine Company provides grapes for winemaking to a particular wine brand. It is one of many vineyards around New Zealand owned by a company which is itself a subsidiary of a large corporate entity holding companies and beverage brands around the world. While the New Zealand company that owns Fine Wine Company and other vineyards has a central executive team, it takes a somewhat more decentralised approach to the vineyards themselves. Each vineyard, including Fine Wine Company, operates with a manager, trainer and staff to produce grapes for different wine brands and the corporate structure allows them to focus on delivery to specific winemakers.

### Workplace members and participants

Fine Wine Company has 12 full-time, permanent staff members including a vineyard manager, a trainer /workplace assessor, several machine operators (one of whom is also an assessor) and several administration support workers.

The vineyard grows to around 35 workers at several points during the year with the addition of seasonal staff members for pruning and particularly at harvest.

We interviewed the trainer/assessor, two current trainees (one a Modern Apprentice), and three experienced workers (two foremen and an assessor). One trainee and two experienced workers were actually from different vineyards or workplaces, though still part of the overall company. However, all had undertaken some training with the trainer at Fine Wine Company.

Unfortunately, we were not able to observe any training taking place. However, we did get a lot of detail about training in our interviews with the trainer and an experienced worker, and we did see the sorts of training resources being used.

### Workplace learning structure

The corporate entity owning Fine Wine Company competes in an international market and is therefore increasingly involved in technical and compliance-related matters that can translate globally. This tends to create pressure to formalise staff learning, development and qualifications—the latter reflecting a growing credentialisation across all levels of the winemaking industry (Mallon, Bryson, Pajo, & Ward, 2005).

The global corporate environment is rendered as policy that all workers undertake some formal training. Permanent workers at Fine Wine Company earn credits towards National Certificates in Horticulture (Levels 2, 3, 4 and 4 advanced). There is also scope to be employed as a Modern Apprentice in Viticulture (National Certificate in Viticulture, Level 4). Some casual workers may be enrolled in formal training, but it is largely up to these workers to be proactive in seeking this. Everyone is trained to the same standard regardless of whether they are registered as formal learners with HortITO or not.

Since a number of the local vineyards near Fine Wine Company are part of the larger company's "stable", training and assessor staff based at particular vineyards often circulate between them. This forms part of the quality assurance process: many trainers are also accredited assessors but they do not assess the workers they have trained themselves. The training manager at Fine Wine Company describes this as building consistency of standards across all the vineyards.

Training is associated with specific tasks at the vineyard, particularly those involving use of tractors, harvest and pruning machinery, and quad bikes or All Terrain Vehicles. Training is typically tied to a Standard Operating Procedure (SOP) manual. These SOPs are produced by trainers, following the introduction of new machinery or procedures. Jake, a trainer, works from existing documentation (manuals, instructions, company policy) to create a "super-manual" that not only shows (through pictures as well as text) how to use and maintain the equipment, but also explains the decision-making principles behind where and when to use it.

The SOP system means that training is organised on a just-in-time basis. Each time new machinery or equipment arrives, the SOP is created and a training round begins for everyone who will use the machinery or equipment. Worker health and safety is a key driver for training so the development of each SOP focuses on ensuring trainees understand clearly how to use machinery in ways that get the job done well *and* safely.<sup>12</sup>

Each SOP is fully aligned with the Horticulture ITO's unit standards so that, as each worker completes the SOP training, they can be assessed for unit standards towards a National Certificate. The seasonal workers, mainly from Vanuatu, undertake in-house training (i.e., not for nationally-recognised unit standard credits or qualifications) in harvesting or pruning work.

### Training is for doing the job

The training at Fine Wine Company tended to have both strong formal and informal dimensions. The training seems formal in its close relationship to SOPs for the main permanent workers (and to major specific seasonal tasks for seasonal workers). New equipment or protocols, or specific major tasks, always involved new SOPs and training across all vineyards to ensure consistent approaches to the work. However, the overall just-in-time nature of training—training as and when required—and its embeddedness in everyday work gives it an informal dimension. One foreman explained that he would read new SOPs together with workers, helping those who find reading difficult, and then let workers "have a go" at the associated practical activities (e.g. driving a tractor). Over the following hours, days or sometimes weeks, he keeps an eye on the learner, watching for their growing confidence and competence and asking them questions about what they are doing to gauge their level of understanding. Once he is satisfied they can meet the SOP standard, he arranges for an assessment (using an assessor from another vineyard) to take place so the learner can be awarded credits from the unit standard.

Not surprisingly, the overall formal learning structures coupled with the just-in-time approach and adaptation to everyday work meant that the workers we interviewed saw training in quite singular terms: it was all about the competence needed to do the job. One worker described it as

12. During 2010 there were 17 deaths in the agricultural sector and a 15 percent rise in serious farm accidents (NZPA, 2011).

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being about “becoming more employable” and “getting better at the job”. Toby, an experienced machine operator, described training as increasing the range of work open to you, which often meant doing more interesting things. He had done a lot of learning on a just-in-time basis in previous jobs and had used his training opportunities to become versatile across a range of jobs within any one workplace. He considered his current training to be “just another course” and was not interested in qualifications, though he knew that “things get written up in a book” and that he is assessed.

The emphasis on *doing* rather than *knowing* framed work possibilities and interest levels in training for most workers we talked to. Blake, an experienced machine operator, had no interest in further workplace learning because he could “already do all the jobs I have to do”, although he acknowledged the difference that training had made to his ability to do these jobs well. Similarly, Toby acknowledged that learning is an attitude of openness that he practises every day and that training has shown him “there’s more to it [the job or particular tasks] than you first think”. Another worker told us he was being encouraged to undertake more training but was reluctant, saying, “what I can *do* now is more than sufficient” (emphasis added). Another worker was eager to obtain a qualification but this was so he could access different work in his workplace and later, with further education, move into new kinds of positions within the industry. He felt frustrated at the slow pace of training and assessment opportunities coming his way. While he received plenty of day-to-day support with his learning, he wanted a sense of his overall progress towards a qualification and to feel confident his learning was being structured and managed. This is an example of variation within an organisation, with an apparent need to ensure that all those responsible for training adhere to the company’s approaches and policies.

### Building confidence in learning and through learning

The formal/informal approach at Fine Wine Company also shows up in trainers’ sensitivity to learners’ needs. One foreman pays attention to reducing anxiety for new learners: “The first day is interesting, when grapes are going into the bin. They get a bit tense. You don’t want to scare them or shout at them. If it goes wrong, we fix it. It’s not a big deal”.

Jake, the trainer/assessor, takes the attitude that “with the right training, anyone can do anything”. This is particularly important at Fine Wine Company where some workers, particularly the machine operators, have no previous formal qualifications or have lower levels of functional literacy and numeracy. The expectation that everyone can learn has been critical to several of the workers we spoke to. Blake, an experienced machine operator, described his schooling as a struggle as he got further and further behind with “no-one to pick you up...I can tell someone about something but my trouble is putting it down on paper”. When faced with training at Fine Wine Company his first thought was, “Oh hell! Here we go, a big headache”. However, he credits the trainer’s supportive approach and that there were fewer people involved, (so he would not fall behind without someone noticing and helping), with his being able to complete his National Certificate by working one or two hours each night, in addition to his daytime work.

### Training for understanding and judgement

Now that Joshua (experienced worker) shares responsibility for learners he sees training as ongoing. At least once a day he will check the pruners’ work and ask questions about the decisions they have made in regard to specific vines. In his view, “every plant is different and so there are different styles of pruning”. He does



not want the pruners to use a standardised approach to their work—he wants them to think carefully about each plant and make a considered decision about the best way to prune it: “Instead of telling them they are wrong, ask them why they did it that way”. Joshua’s approach echoes one described in research on tropical fruit workers learning a new pest management system. The new system required workers to stop following a predesignated spraying schedule and use their judgement to recognise pests and make decisions about spraying according to what was actually happening at the time—a tricky shift that not only required workers to learn new knowledge about pests but also to operate differently and think about themselves in new ways (Else & Sirichoti, 2003).

Blake acknowledged the difference training had made to his ability to do his job unsupervised and with some autonomy over decision-making: “Training is what you need to know so you can do the job. If you’ve had good training, it makes the job a lot easier. If not, you’re scratching your head over what to do and if you should ring the boss and ask”.

Jake ensures understanding with learners by adjusting his teaching to them: “People learn in different ways. In the end, it doesn’t matter how you get there”. He therefore consciously works at developing a wide and flexible repertoire of techniques. He gets other trainers, and machinery dealers, to observe him and give him feedback. Similarly, he believes that resources are best developed collectively through bringing together expertise from different vineyards, writing and rewriting together and revisiting the resources regularly.

In one case he reported training workers with almost no English language by using only the words “good” and “bad” (which they did understand) on cue cards while practically demonstrating: “Understanding is 90 percent of the learning. If they don’t understand, they won’t learn. I never ask people if they understand because they will just say “yes”. Instead I show

interest in how people are getting on with their learning. I ask them “How are you finding this?” I get learners to tell me how and why they are doing what they are doing”. He also encourages learners to ask questions to help him know whether they have good understanding: “The only silly question is one not asked”.

### **Conclusion: The role of the trainer in managing formal/ informal learning**

In common with the other case studies, learning at Fine Wine Company had a significant ‘learning by doing’ dimension, and was quite informal. How this informal learning articulates with the formal learning of demonstrated competencies to a certification framework is an issue all workplaces grappled with. In most workplaces, leadership in managing this linking of formal with informal learning was exercised by the trainer. This leadership was particularly noticeable at the Fine Wine Company.

The principal structure at Fine Wine Company that determines what is needed to learn on the job is the SOP manual. The company motivation for most of these SOPs is to maximise worker health and safety. The trainer does two things with these SOPs. First, the trainer clarifies the learning content by working from existing documentation (manuals, instructions, company policy) to create a “super-manual” that not only shows (through pictures as well as text) how to use and maintain the equipment, but also explains the decision-making principles behind where and when to use it. This is a key resource for learners to know what they need to learn to do the job. Secondly, the trainer links each SOP with the ITO unit standards. This makes it easy for the trainer and the learners to link what is being learned informally with the formal qualifications framework, and to evidence this.









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