

A close-up, sepia-toned photograph of a young girl's face, looking slightly down and to the right. Her hair is curly and light-colored. The image is partially obscured by a dark red vertical bar on the left and overlaid with a word cloud.

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What value do employers give to qualifications?

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What value do employers give to qualifications?

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Publisher's note

Additional information relating to this research is available in *What value do employers give to qualifications? Support document*. It can be accessed from NCVER's website <<http://www.ncver.edu.au>>.

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Key messages

- ✧ Employers value qualifications mainly for higher-level occupations and for recruiting new employees about whom they have otherwise limited information. Qualifications are also used to manage regulatory compliance risk, such as occupational health and safety. Employers see qualifications as less important in managing business risks, such as potential loss of profit, believing these risks require forms of control other than skills development/qualifications.
- ✧ The particular industry sector does not seem to influence the way in which employers value and use qualifications, although the size of the enterprise does. Employers of larger enterprises tend to support a more 'comprehensive approach' to worker qualifications, while small business owners tend to be more discriminating when assigning worth to qualifications.
- ✧ The type of enterprise also influences employer perspectives on qualifications. Enterprises undergoing structural and other change or those involved in highly innovative activities are less supportive of qualifications in their workers.

Executive summary

Purpose

What value do employers assign to qualifications? This study seeks to ascertain the overall level of importance employers place on the qualifications of their employees; whether employers value qualifications differently for new versus existing employees, by occupation classification and type of enterprise; the types of competence for which employers require formal recognition; and the decision-making processes employers adopted when assigning value to qualifications.

Method and scope

Qualitative research methods were initially used to determine employer views. Interviews were held with key informants in industrial associations, and focus group discussions were held with industry groups in metropolitan and regional locations. The outcomes were used to develop the survey instrument for the quantitative research.

The survey was initially conducted as a mailed questionnaire, but a poor response rate required results to be supplemented by a telephone interview survey. Some adjustment was required for the telephone survey; however, the data collected by telephone survey and mailed questionnaire were similar enough to allow some combined analysis. The total sample population from the combined surveys (150 enterprises in manufacturing, construction, service and transport) placed some limitations on analysis, and therefore the degree to which the results can be generalised. Due to sample size and potential sampling errors, caution must be exercised when seeking to apply these outcomes. The final sample population was fairly evenly represented across enterprise size categories (small, medium, large).

Key findings

First, although there was strong consensus between respondents that degrees conferred by universities and certificates and diplomas by registered training organisations were qualifications, there was only a limited consensus between respondent employers about what else constitutes a qualification. The great majority of the respondents view 'qualifications' as signified by some form of documentation.

While 90% of the respondent employers valued qualifications in managing at least one risk in their enterprise, less than 25% value qualifications unconditionally. Rather, qualifications were valued if they support business decisions or operations that add to the security and prosperity of the enterprise. Even those who valued qualifications as universally worthwhile, differentiated between circumstances with greater (or lesser) benefits.

Respondents made a strong distinction between qualifications and *experience*, the latter being more valued across a wider number and type of business circumstances. Often, the skills most valued are 'employability skills' (such as attitude, language and literacy, communication abilities and team work) or 'generic skills'.

Second, respondents were found to use qualifications differently by type of employee (new versus existing, by occupational classification), and by type of business risk they were attempting to manage. This qualification usage was influenced by a range of enterprise characteristics, such as their size, the business environment under which they were operating or the extent to which they were innovating enterprises.

Respondents accepted the importance of qualifications for professional, technical/trades and managerial categories of employees. Here, over 90% believe qualifications are important. This compares with 60 to 67% of respondents who perceived qualifications as important for operators and drivers, sales and clerical staff. Only 29% supported the need for qualifications for labourers. Nearly 70% of relevant employer respondents indicated that qualifications are important for plant operators (which suggests that industry training promotion efforts, or other factors such as regulatory requirements, have influenced outcomes in this area).

Respondent employers used formal qualifications most when planning for future skill and training needs, recruiting new employees (about 90% of respondents) and ensuring regulatory compliance (around 80%). Other types of human resource management actions, such as remuneration decisions and creating employee loyalty, were less influenced by the employee's qualifications. The respondents appeared to make a distinction between 'external' and 'internal' human resource management decisions. Planning for an enterprise's labour requirements, scanning the labour market, and recruiting to meet requirements, are 'external' human resource management decisions, since they involve engagement with forces and systems outside the enterprise. Qualifications in this context provide information to support decisions in otherwise information-poor situations.

Qualifications are also used by the respondent employers as part of managing their business risks. A list of the most prevalent risks was generated through the mailed survey and used during the telephone survey. Given the diverse enterprise population, there was a high level of agreement on the main business risks. The risks fell into two broad areas: 'compliance risk' (for example, in occupational health and safety, accounting, and other areas governed by regulatory requirements); and 'business' risk—potential loss of income or profit (for example, due to poorly made products, badly delivered services, poor customer service, loss of stock, and wastage of resources). Both areas were considered important by respondents, but it was argued that compliance risks were better controlled with a 'qualification', or through 'skills development', while the business risks were more likely to require other forms of control. For example, a higher proportion of respondents reported formal qualifications as important for managing legislative and occupational health and safety compliance risks (49% and 58% respectively), whereas only 16% and 12% respectively reported similarly for the next most highly ranked risks (insufficient insurance and loss of client or customer base).

Third, the different employer types value qualifications differently. Larger enterprises tend to support a more comprehensive approach to worker qualifications, predominantly to facilitate harmonious employee relations, to develop a learning culture in their organisation, and to develop the enterprise's 'intellectual capital' (Sexton 2003; Department of Industry, Trade and Resources 2000). Smaller enterprises tend to be more discriminating in assigning worth to qualifications and prefer a quick return on training investment.

In this study, the industry sector did not seem to significantly influence how respondents valued qualifications. However, there was a suggestion that classifying enterprises into two alternative industry categories—termed the 'old' economy and the 'new' economy—might be effective. In this categorisation 'new' economy refers to enterprises capitalising upon innovations (particularly in information and communications technology) and 'old' economy, those less so. This helps to explain the relationships found between the level of change in enterprises and the extent to which they were innovative, and the valuing of qualifications. Conventional wisdom presumes that substantial enterprise innovation and change would be associated with broad human capital investment (and high proportions of appropriately qualified staff). However, the findings here were that high levels of enterprise change and innovation were associated with lower support from

enterprises for the value of qualifications among their employees. Perhaps these conditions translate into a demand for more 'just in time' type skills development, whereas the pursuit of qualifications is more long-term and strategic.

Finally, a small proportion of respondents across industry sectors, enterprise size and a range of other characteristics, probably less than 15%, consistently value skill and experience above qualifications. A similar proportion of respondents believed strongly in the value of qualifications as such. The remaining respondents, the majority, valued qualifications, but conditionally, based on their enterprise's particular circumstances.

From the VET planning and implementation perspective, the complexity of circumstances that confront employers is not always matched by a similar array of training products and services.

Introduction

The study explores the importance that employers place on the qualifications held by their employees. The objectives of this study were to:

- ✧ ascertain the overall level of importance employers place on qualifications held by their employees
- ✧ identify differences in the way employers value qualifications, depending on the type of employee (new or existing), the type of job classification, and the type of enterprise
- ✧ explore the types of competence for which formal recognition is pursued and why
- ✧ understand what decision-making processes are adopted, and to seek patterns between employers.

Background

Research conducted recently by Ridoutt et al. (2002b) has confirmed that few employers are interested in the actual qualifications themselves as an outcome of enterprise training (that is, training largely initiated by employers and funded wholly or partially by enterprise resources). In Ridoutt et al.'s 2002 research, only two of 23 case study enterprises selected from across five industries valued and actively sought qualification outcomes for their employees who had completed enterprise training—in terms of qualifications defined in the Australian Qualifications Framework. This is a surprising result, given that most of the case study sites had invested significantly in training their employees, often in a formal and structured way, and, in at least six cases, in partnership with a registered training organisation.

Moreover, there was a relevant training package for 22 of the enterprises, a copy of which they had purchased, but only nine were using the package (including those about to use it). The study demonstrated that the formal (and costly) assessment processes required for recognising workplace competence in order to achieve a qualification were not deemed necessary for all types of competency, and hypothesised that employers adopt a 'risk management' approach to the process of competence assessment. As described by Gonczi, Hager and Athanasou (1993):

There is no universal method of performance assessment and the process of assessment is largely one of balancing conflicting demands and compromising fidelity ... Compromises may be required between the acceptable costs of testing vis-a-vis the acceptable costs of errors in judgement.
(Gonczi, Hager & Athanasou 1993, p.50)

This study gathers mostly quantitative data to build on the previous research of 23 case study enterprises drawn from five industries (Ridoutt et al. 2002b), which identified unexpected employer perspectives on the value and active pursuit of qualification outcomes for employees.

The following are the main research questions addressed in this project:

- ✧ Are there recognisable and significant variations in the use of qualifications between different 'categories' of employers?
- ✧ Are there recognisable and significant variations within enterprises in the valuing of qualifications based on such aspects as the type of employee, type of job classification or role, the types of competency?

- ✧ If employers do value qualifications:
 - ◆ why do they?
 - ◆ what for (employee selection, motivation, promotion, performance management)?
 - ◆ are some qualifications more valuable than others?
- ✧ If employers do NOT value qualifications, why not, and what factors might make this change?
- ✧ Who makes decisions about the type and level of competency assessment? On what basis are decisions made, using what criteria? Is a risk management approach adopted?

Methodology

A survey was mailed to a large number of enterprises. By employing this technique, the research methodology sought to establish quantified findings across different-sized enterprises in different industries. Although responses were obtained from 150 enterprises, this was a smaller sample size than had been anticipated, and hence limited both the analysis by sub-groups and the generalisability of the findings.

The following steps were undertaken to develop and administer the mailed survey tool to employers:

Stage 1: semi-structured interviews of major employer groups

Stage 2: focus group discussions to sharpen the research questions and to inform questionnaire design

Stage 3: specific literature review informed by information gathered through the focus groups

Stage 4: focus group discussions to validate the draft questionnaire design

Stage 5: pilot testing of survey instrument

Stage 6: mailed questionnaire survey of employers.

As the initial response rate to the mailed questionnaire survey was very poor—effectively about 10%—the following steps were undertaken to complete the research:

Stage 7: telephone surveys of more employers using a simplified questionnaire

Stage 8: analysis of qualitative (interviews/focus groups) and quantitative (mail/telephone survey) data, interpretation and reporting.

Ultimately, 81 mailed and 69 telephone survey responses were received and analysed together, producing the 150 required responses. Generally, the surveys were similar enough to enable combined analysis, but where results from one or the other have been reported, the source of the information has been clearly identified.

Appendices A and B respectively discuss the project methodology and characteristics of the sample population in greater detail. All appendices can be accessed in the support document on the NCVET website <<http://www.ncver.edu.au>>.

Literature review

Introduction

Interest in qualifications as an outcome as such largely emanates from the vocational education and training (VET) sector. Moran, for example, has noted that a measure of the competitiveness of a nation in the global marketplace is that nation's ranking in the number and type of qualifications held by its workforce (Moran 1998; see also Sargent 1998; Noonan 1998).

Some authors have identified an almost singular preoccupation within VET circles with qualifications as the primary measure of training outcomes. Certainly qualifications are tangible outcomes of training for individuals, employers, training institutions and governments. Also, they are comparatively easily counted. Few, if any, education and training institutions would not measure the success of individuals (students) by completion of a course (and the attainment of a qualification), although part-completed courses can also be valued (although generally less so) by stakeholders on occasion (NCVER 2000). Sargent has argued that, where goods and services are traded in a global market, there is an increasing demand for consistency in the definition of skills and for assessment of skill standards (Sargent 1998). Qualifications delivered against an overt standards framework allow mutual recognition of skills and knowledge across wide geographic, jurisdictional and international boundaries (Varanasi 1999). At least in theory, this can facilitate labour mobility across enterprise, industry and geographic boundaries, by offering some evidence of competence that is widely accepted.

Following this same line of reasoning, qualifications are often used as the currency for international comparisons (for example, Prais & Steedman 1986). Notwithstanding, evidence is mounting that qualifications are perceived quite differently in diverse countries, societies and cultural contexts. For instance, Green and Sakamoto-Vandenberg (2000) argue that, within high skills economies such as Germany, there is a high level of demand from firms for their workers to have achieved qualifications, and that there tends to be a high degree of trust in the qualifications. This trust can be argued to be a product of both the institutional links between industry and the vocational training system, and also the product of a broader national culture of high trust (Keating 2002).

Denmark also maintains a high degree of linkage, but emphasises a broader concept, that of social partnership, which is more distributed and localised (Keating, Polesel & Teese 2000). Institutional flexibility that allows for specific relationships at the regional level between enterprises and the education and training providers can also be found in the Netherlands (Streumer 1999). More generally, some societies, for example, Japan, might be described as characterised by high trust, which is viewed as a general cultural characteristic, which in turn can contribute to high levels of trust being exhibited in particular institutional forms, including qualifications. The Organisation for Economic Co-operation and Development (OECD) has argued that qualifications tend to be based on 'communities of trust' (OECD 2001). Thus, qualifications that are controlled or endorsed by relatively closed communities tend to have a high degree of trust. However, if the communities are broadened and their control over qualifications is loosened, the degree of trust may decline.

Employer perspectives

Employer's perspective on investment in training

The available literature strongly suggests that qualifications for workers (especially arising from enterprise-based training) are not a principal concern of employers (for example, Wooden & Harding 1997). Training investment is meant to benefit the business; anything else that derives from that investment (for instance, qualifications) is welcome, but incidental (Noble 1994; Stokes 1998).

Research conducted by several authors (for example, Allen Consulting Group 1999; Research Forum 2000) suggests the following benefits of training are important to employers:

- ✧ improved quality
- ✧ improved productivity/competitiveness
- ✧ multi-skilling of employees to cover all knowledge and skill gaps
- ✧ compliance with government and other regulatory requirements (such as occupational health and safety legislation)
- ✧ workplace change.

As the Allen Consulting Group notes, employers by and large accept the value of training.

... investment in skills, knowledge and training can raise labour productivity and enhance the productivity of capital. Productivity gains improve the competitiveness and profitability of business. (Allen Consulting Group 1999, p.ii)

Small businesses, which employ approximately 40% of the total Australian workforce (ABS 1998), are argued to be especially indifferent to the attractions of the VET system in general, and qualification outcomes in particular. For instance, Gibb (1999) notes:

If there is a prevailing training culture in Australia at present, then it is one which is based on structured training and/or recognition of competencies gained in work and life experience leading to qualifications. The statistical data suggests that this prevailing culture has failed to have an impact on small business. (Gibb 1999, p.40)

Stokes, in affirming that 'VET orthodoxy is of no particular value to small business' offers some insight as to why:

VET success is measured in terms of learning outcomes, national standards and credentials, whereas for small business 'success' means profitability and survival. (Stokes 1998, p.25)

Spotlight on the value of qualifications

Because of the spotlight on qualifications, much of the research on 'outcomes' of VET has focused on the results of study, course completions and graduations for individual learners, often in pre-employment settings, but also as a consequence of workplace-based training.

The research in this project is exclusively concerned with employer perspectives. The views of employers and employees on the outcomes of training are assumed to be different (Allen Consulting Group 1999), but evidence to support this contention is limited. On the contrary, like employers, workers often appear to be more concerned with being competent to perform their job well, and content to believe that rewards, such as higher pay, faster promotion or improved job satisfaction will flow axiomatically from this consequence. Studies of the returns to workers from employer-provided training seem to support this view, at least in relation to wage prospects (Blundell, Dearden & Meghir 1996).

Where outcomes for employers have been considered, the research questions have tended to revolve around two main issues—the value of qualifications as a screening tool in personnel selection and the return on investment in training.

Qualifications as a 'screening' tool in personnel selection

In many instances, employers make use of qualifications to estimate work-related characteristics of candidates. For example, characteristics of individual workers, such as motivation, persistence and broadly related technical skills are often relevant when enterprises make job-related selection or promotion decisions. It can be argued that qualifications represent a formal information system which operates in labour markets to assist employers make their human resource management decisions. Keating (2002) suggests that the use of these information systems is related to the following factors:

- ✧ the types of skills required or needed
- ✧ the potential match between the skills implied by the qualifications possessed by the individual and the skills being sought by the firm
- ✧ the reliability of the qualifications in terms of the specific purposes for which the information is being sought and the resulting degree of trust that the employer or recruiting person has towards them.

A study of staff selection criteria and recruitment by Wooden and Harding (1997) also looked at the role of qualifications within the recruitment and promotions processes used by employers. They found that attitudes, skill, experience and appearance were important selection criteria and were often given more weight than educational attainments. However, there were also differences between areas of work; for example, education was particularly prominent in the recruitment and promotion processes of skilled white-collar workers.

Return on investment in training

Employers do not necessarily always have a sound understanding of the relationship between the costs of training and the resultant business benefits (Long et al. 1999). This is partly attributable to the actual difficulty of isolating the influence of training effects and ascribing causality.

These issues mirror the distinction that might be drawn between first, those situations where qualifications, considered as a certificate of competency, are required to perform a given job, either because of the inherent requirements for effective performance of the work, including any relevant risk assessment aspects, or because of externally imposed requirements (such as legislative requirements) and second, where employers opt for training, either accredited or not, for existing workers (where accredited means training which leads to a formal qualification issued under the Australian Qualifications Framework).

Focus in this project

The focus of this research project is on both instances, since they form potential end points to a continuum of employer decision-making options; for instance, when an employer requires a job to be performed, has no current employee with the relevant skill, experience and so on to do the job, and so faces the decision whether to recruit or train (or perhaps recruit and train).

In a precursor study to this current research (Ridoutt et al. 2002b) the focus was primarily on employers' expectations with relation to the outcomes of training. It noted (amongst other findings) that:

- ✧ Not all competencies are the same.
- ✧ Training effort is largely aimed at achieving specific competence outcomes, through a variety of forms.

- ✧ Employers possibly take a risk management approach to training and assessment.
- ✧ The demand side of training is often poorly managed.

Each of these elements is relevant to the present study, so that conclusions from the earlier literature are reviewed briefly in subsequent sections, together with the studies from which they were derived.

Not all competencies are the same

Not all units of competency are treated equally by employers. There are at least two ways in which employers differentiate between competencies: first, between critical jobs (Cutler 1992); and second, within jobs between those competencies considered more critical to productivity (Payne 2000). It is hypothesised that employers differentiate between competencies by choosing those competencies critical to the outcomes of the business. They do this by requiring formal assessment and recognition against a relevant training package. Based on experiences in the industries from which the case study enterprises were selected in the previous study (Ridoutt et al. 2002b), employers appeared to target four main types of competencies for recognition: competencies associated with 'tickets' and licences conferred by non-training bodies; competencies associated with training and assessment; competencies associated with occupational health and safety; and job-specific competencies.

In relation to the first three of these types of competencies, employers are not necessarily positively disposed towards assessing and recognising competence, but are required to do so by legislation, regulation, rule or fear of the consequences (that is, they have to demonstrate compliance in some way). Examples of competencies in this group include forklift drivers licence; rigging and scaffolding competency tickets; restricted electrical licence; workplace training and assessment qualifications; and permits for working in confined spaces.

There was some support for the proposal that the fourth type of competency requiring formal recognition was the 'defining' competency, that is, the competency so termed because, in relation to technical content, they define the job (for example, 'operate an injection moulding machine' in the case of an injection moulder, or 'screen the film' in the case of a film projectionist).

As well as treating various competencies differently, Ridoutt et al. (2002b) noted that a large number of competencies were identified by employers as being required to be performed well, significantly in excess of the level needed to obtain a qualification at an Australian Qualifications Framework level appropriate to the job. Generally speaking, competencies surplus to the formal competence requirements of jobs appeared to be regarded as a good workforce characteristic, particularly because it promotes flexibility. Should the competence requirements of a job or role change, perhaps due to technological change or an organisational restructure, then surplus competence implies that the workforce has room to move and to adjust to the new circumstances. This appeared to be advantageous to the enterprise, to the individual worker (either in this enterprise or elsewhere), and to society more generally.

The OECD (2002) hypothesises that it is not just the breadth of competence that facilitates efficient labour movement. They speculate about individually held competencies which they term 'wider human capital', the possession of which enables the worker to build, manage and deploy 'basic' human capital (the latter being akin to the four types of competencies outlined above as being most likely to require recognition). Wider human capital includes the ability to acquire and develop skills, the ability to find the best place to use those skills, and personal characteristics (like trustworthiness) which make people more attractive as employees.

Employability skills

Strong support amongst employers in Australian studies has often been found for so-called 'soft' skills or 'support' competencies (for example, Ridoutt & Willett 1994). A recent study of the decline of apprenticeship uptake in the electrical industry found that qualifications, or at least courses designed to deliver formal qualifications, were losing their lustre. Many employers were valuing less what the traditional apprenticeship product could deliver. Instead they were increasingly favouring competence development that delivered 'the operative who can handle uncertainty and solve problems' (National Electrical and Communications Association 1998, p.23). Similarly, research conducted for the Australian National Training Authority's (ANTA) national marketing strategy found that generic skills (by comparison with 'job-specific skills') were more popular with employers, especially in enterprises with turnover greater than \$5 million (Research Forum 2000).

The Australian Chamber of Commerce and Industry and the Business Council of Australia (2002) have provided a detailed report to the Australian Government on the employability skills needed by industry (in addition to job-specific or relevant technical skills). The report emphasised the importance of workplace skills, such as communication, teamwork, problem-solving, initiative, planning and organisation. The report emphasises that business and industry now require a broader range of skills than those encompassed by the Mayer Key Competencies framework which was developed in the early 1990s.

Billett has also considered the appropriate strategies for the effective practice of workplace learning (Billett 2001). The Australian Chamber of Commerce and Industry and Business Council of Australia commented in their report that the elements (contained within the competencies) related to the required skills are expected to change, both in their nature and priority, in line with the business activity of enterprises. They also noted that flexibility needs to be maintained in relation to generic skills.

The concept of 'generic', 'support' and 'employability' skills is not without critics. Some British commentators are concerned by a trend towards valuing 'support' competencies more highly than 'defining' or 'technical' competencies (Cutler 1992; Payne 2000).

Models of enterprise training activity

Ridoutt et al. (2002a) recently considered the factors which influence the implementation of training and learning in the workplace, and several previous studies have attempted to develop models for understanding the factors which influence the training undertaken in enterprises (Sparrow & Pettigrew 1985; Hendry & Pettigrew 1989; Hayton et al. 1996; McIntyre et al. 1996; Maglen & Hopkins 1998; Seddon & Clemans 1999).

One of the most comprehensive of these models based on Australian research is that of Hayton et al. (1996). The research team concluded that enterprise training (both in nature and extent) appeared to be largely dependent on three main elements. First, there were training drivers, which were defined as factors within an enterprise that triggered training activity and that were perceived by those within the enterprise as the reason for training activity in one or more of its various forms. Secondly, there were environmental factors, conditions in the operational environment of the enterprise which had an impact on the enterprise and which tended to generate one or more training drivers. Examples could include changes in government regulations or competitive pressures. Thirdly, there were mediating factors, which were factors within the enterprise which diminished or increased the amount of training activity which was undertaken, or which affected the form of the training activity, such as organisation size and the main activity or industry of the enterprise.

Building on this earlier work, Smith and Freeland (2002) conclude that there are four key factors which are associated with the provision of industry training in Australian enterprises:

- ✧ workplace change, whose form may vary, but where there is frequently an emphasis on quality improvement and flexibility
- ✧ generic skills, with enterprises moving away from an emphasis on training for job-related technical skills and more towards skills that will introduce greater degrees of adaptability and flexibility in the workforce
- ✧ a close connection between training and business strategy
- ✧ new training structures which reflect the management fashion for decentralisation and the allocation of higher levels of responsibility to both line managers and individual workers.

Smith and Freeland (2002) also note that changes in the Australian labour market are favouring the emergence of non-standard forms of employment, such as part-time and casual and outsourced workers. Although both of these trends 'are associated with a lower incidence of employer-supported training, it is clear that both casual and outsourced workers depend on their skills for their employment and are increasingly undertaking training at their own expense to maintain and increase their skills' (p. 17). They argue that the individualisation of industry training is being associated with a changing role for the enterprise to become a broker rather than the provider of training. The changing industrial relations environment within which VET training occurs is also discussed by Teicher and van Gramberg (2001) and by Teicher in Selby Smith and Ferrier (2003).

Informal learning

Blandy et al. (2000) concluded from a review of recent overseas studies in the United States, the United Kingdom and Europe, that informal learning and training methods, on and off the job, were regarded by many businesses as generally superior to formal classroom training. The terms 'formal' and 'informal' and 'structured' and 'unstructured' are used widely in vocational education and training practice and in the literature, especially in relation to training (for example, Smith 1997; Research Forum 2000), although often without a precise definition. Hager for instance, refers to a linkage between formal on-the-job training and informal workplace learning, but goes on to argue the need for further research on learning in the workplace, 'especially the informal kind' (Hager 1997, p. 6).

A recent study by Figgis et al. (2001) examining enterprise cultures of training and learning found that when people in enterprises described their experiences of training and learning, the outstanding feature was how important 'informal' processes were to them. The respondents, who ranged from shopfloor workers to senior managers, considered formal training to be that which is organised by an expert who has clear expectations of what skill or knowledge is to be learned—whether certified or not, long or short, self-paced or classroom-based. 'Informality' referred to two different aspects of learning and training. First, it referred to the specificity of the *outcomes* expected. Secondly, there was the formality (or informality) of the guidance given to the learner. The processes were all relatively informal, but the final outcomes can be—although they need not be—formally specified, either in advance through annual performance reviews or retrospectively in a recognition of prior learning process.

An enterprise's interest in informal approaches is not meant to denigrate formal approaches to training and learning—almost all of Ridout et al.'s (2002b) case study enterprises used both.

Workplace trainers

Another recent study which identifies related training matters was conducted by Harris, Simons and Bone (2000). They concluded that work and learning are inextricably interlinked, and shape each

other in a dynamic interrelationship; for example, when trainers structure and manipulate work processes to accommodate employee learning. They identified five functions as central to the role of the workplace trainer:

- ✧ fostering an environment conducive to learning
- ✧ working and learning with co-workers
- ✧ structuring and shaping work processes to accommodate learning
- ✧ promoting independence and self-direction in learners
- ✧ linking external learning experiences with work and learning in the workplace.

They found that 'informal' workplace training (and learning) was very common, judging from the overall frequency of trainer actions reported by respondents, and that there was a high incidence of trainer actions related to encouraging self-direction in learning in employees, and structuring and shaping work processes to accommodate learning.

The least frequent 'trainer actions' were those relating to the linking of internal and external learning experiences, particularly the action of liaising with external providers. Similarly, in a study of employers with metal trades apprentices, Ridoutt and Willett (1994) found that most of them had no idea what was being taught to their apprentices in their off-the-job training. Also, they felt it was inordinately difficult for them to meet their training needs at the same time as being able to meet their production deadlines. The study by Ridoutt et al. (2002b) identified only four case study enterprises with strong and productive relationships with a registered training organisation out of the 23 they studied. For each of these four enterprises, the association between enterprise and registered training organisation was characterised by a 'normal' market relationship. It included the enterprise being clear in its demand for training services; the registered training organisation observing the parameters of the service demand; and the enterprise being vigilant in ensuring services were supplied 'to specification'. These relationships with registered training organisations seemed to work best when the power balance resided with the enterprise. The Allen Consulting Group (1999) found successful enterprise registered training organisation relationships were built where the enterprise understood their core business (which was not training) and sought out like-minded education and training providers with whom they could design focused training programs in partnership.

In the enterprises which participated in the Harris, Simons and Bone (2000) study, it was primarily work that shaped the learning, and the learning network that shaped the role of the workplace trainer. In some cases, the workplace trainer had a key role to play in the learning network, as in the case of the trainer who was part of a human resource department in an enterprise. In other instances, the workplace trainer was a worker, and the work structures, processes and content shaped and limited the time and energy he or she could devote to facilitating learning. Trainers in different enterprises developed different ways of working. However, effective workplace trainers were aware of the impact of the work network on learning in their enterprise and how the work network could be shaped and reshaped by their actions in supporting learning.

Assessment taxonomy

In an earlier section the tendency for employers to differentiate between competencies was discussed. A taxonomy which differentiated between competencies on the basis of rigour of the assessment methodology and the 'fit' within the framework of a relevant training package was developed by Ridoutt et al. (2002b). They hypothesised four types of competencies that employers might treat differently. Group A included competencies employers sought to have recognised within the Australian Qualifications Framework. Group B covered those competencies that employers wished to have assessed in their workplace, but for which recognition as a formal qualification was not required. Competencies were formally assessed in a structured manner against

a standard. Group C included competencies the employer determined as not requiring formal assessment. These competencies were assessed through subjective judgement, generally did not involve a structured process and were not referenced to a standard.

Group D included any other competence requirement that was not covered or defined by any existing competency in a training package in the Australian VET system. They included competencies or part-competencies ('competency fragments') not appropriately defined or covered for the particular workplace, or where for some other reason, workplace assessment was difficult. Social, attitudinal or behavioural competence, or other non-defined 'technical' competencies, also appeared in Group D. Although these categories received acceptance from employers who were readily able to grasp the categories and with whom a shared meaning could generally be established, they are consistent with the conclusion of Toop, Gibb and Worsnop (1994) that any assessment system is highly 'context bound'.

In the taxonomy described above, the concept of non-formal assessment causes the most consternation. All of the ambiguity associated with the terms 'informal' and 'unstructured' in relation to training also attends the assessment process. In reality however, the terms are probably used in both training and assessment contexts as proxies to describe and gauge the level of *assessment* effort, the assumption generally being that 'formality' and 'structure' equate with high levels of assessment effort and methodological rigour (Ridoutt et al. 2002b).

A risk management approach to assessment

Authors commenting on assessment and recognition of prior learning issues early in the history of the training reform agenda appeared to be quite keen to discuss the mechanics and the merits of a risk management approach (Vocational Education, Employment and Training Advisory Committee 1993; Gonczi, Hager & Athanasou 1993). For instance, Gonczi, Hager and Athanasou firmly believed that there is no universal method of performance assessment, that the process is largely one of balancing conflicting demands and compromising fidelity, and that compromise will typically involve trading-off acceptable costs of testing against the costs of error in judgement.

Another way of considering risk is to establish a connection between the level of risk and the degree of recognition being sought. The Vocational Education, Employment and Training Advisory Committee has argued that '... claims for recognition for a few units of competency represent low risk situations because further training and, by extension, further assessment will be required (1993, p. 18). This conceptualisation of 'risk management' is likely to have more resonance with VET practitioners than with enterprise managers, but it still introduces the possibility of varying rigour in the assessment process, specifically the amount and quality of evidence required, and the involvement of more assessors to make the final assessment decision. The higher the risk and the more adverse the consequences, the more important becomes the assessment process and the more likely it is that a formal recognition pathway will be sought.

It is clear that many employers favour a risk management approach to assessment of competence, one which essentially seeks to balance cost on the one hand, and validity on the other (Ridoutt et al. 2002b). How widespread this practice is amongst employers is one aspect under study in this research.

The link between training and assessment

An unexpected finding of the study by Ridoutt et al. (2002b) was the relationship between the level of formality and structure in the delivery of training and assessment processes. A logical expectation would have been a more formal approach to training accompanied by a similar approach to assessment processes. However, in fact, there was a much less precise relationship. While formal

training was strongly associated with formal assessment, it did not follow that unstructured or informal training was associated with informal types of assessment. Indeed, the enterprises whose training effort was largely unstructured were, in general, associated with higher levels of formal assessment than those enterprises adopting a largely structured training approach.

Other factors to consider

Leading edge firms

Long and Fischer (2002) examined the role that leading edge firms can play in detecting changes in the demand for training. Leading edge enterprises were defined as those at the forefront of their industry in terms of growth or market share, and which have extended their activities to international markets. Long and Fischer studied two leading edge firms, one of which was a car component manufacturer; the other was a spinning mill. In general, the authors argued that leading edge firms are likely to be influential in skill formation in a number of ways. Their effects on skill formation may be indirect and follow from the diffusion of successful technologies, products or human resource practices as competitors attempt to emulate the successful practices of the market leader. The effect may be more direct where commercial relationships exist between larger and smaller enterprises, either as customers or suppliers of each other.

Long and Fischer (2002) drew several implications from their case studies for training. For instance, flexibility of production, that is, the ability to operate with shorter production runs, can provide a competitive advantage in the domestic market, but is more demanding on the skills of the workforce. Flexibility and multi-skilling have been a condition of the survival and expansion of both these enterprises. In addition, the introduction of flatter management structures and work teams has increased the need for management training among a far broader category of workers than previously required.

A potentially more general understanding of the relationship of leading edge enterprises with VET comes from the study by Burke et al. (1998). Their study of leading edge enterprises in a number of industries found that training for skills in new technology areas was, in the first instance, usually provided on an *in-house* basis by established training departments. Moreover, each enterprise had experienced deficiencies in the existing institutionalised systems of training in relation to meeting new skill requirements.

Intellectual capital

There has been an increase in enterprise accounting for skills as indicators of intellectual capital. (For a recent discussion see Selby Smith et al. 2001, pp.44–52.) Whether an enterprise perceives its expenditure on training as a cost, or as an investment that will contribute to its success influences the decisions it makes about how much training to undertake, of what kind, and for whom.

Traditionally, financial statements have played a significant role in guiding decision-making in enterprises, but in the new ‘knowledge economy’, reports which highlight the ‘intellectual capital’ of an enterprise are becoming a more important source of useful information. Although few enterprises in Australia have begun to assess and report their intellectual capital systematically, there is evidence of a growing awareness of the important role of intellectual capital and of preliminary discursive reporting. More systematic reporting in the future is likely as experiments continue with assessment systems and methods (Guthrie et al. 1999; Ferrier & Wells 1999).

In a recent interview, VPAC Engineers and Scientists, a ‘new economy’ company, attributed its success in part to ‘a strong commitment to building employee intellectual capital’ (Department of Science, Industry and Resources 2000). Similar sentiments can be found in the annual reports of some of Australia’s largest and most successful companies. Preliminary research in Australia has found that, by helping to demonstrate the links between investments in training and economic success, even the present limited level of intellectual capital reporting encourages a more positive

attitude to training investment. Intellectual capital can include the skills and knowledge of staff, internal systems and processes, and relationships with clients and suppliers, but it may also include brand names and trademarks (Ferrier & Wells 1999).

Networks

Hall, Buchanan and Considine (2002) have argued that employer behaviour in relation to training should be considered through the notion of skill ecosystems, and not solely in the context of the individual enterprise. They define skill ecosystems as clusters of high, intermediate or low-level competencies in a particular region or industry, shaped by interlocking networks of firms, markets and institutions. They argue that any new national approach to employer funding for education and training should promote collaborative arrangements between employers, unions, training providers and workers within regionally and industrially defined labour markets, and that these are the means by which policy can help stimulate and cultivate the development of high-skill ecosystems. They also recognise the deployment and appropriate utilisation of skill in Australian workplaces as a critical issue. In particular, they emphasise that, where employers invest in training, they are more likely to value the resultant skills and more likely to ensure that those skills are used and deployed to productive ends. Collaborative institutions with strong employer and other stakeholder representation can provide a strategic perspective on the inter-related issues of skill needs, training provision, quality, skill deployment, job design and work organisation.

Conclusion

In spite of the VET focus on qualifications as the primary (even exclusive) means of assessing the outcomes of training, a broad acceptance has emerged that they represent only the tip of the iceberg, in terms of training conducted in most (Australian) enterprises, and certainly only a fraction of the actual skill acquisition outcomes (Daly 1991; Hager 1997; Black 1997; Department of Employment, Education, Training and Youth Affairs 1998).

Accordingly, evidence is mounting that suggests that stakeholders outside the VET system, particularly employers, do not value qualifications as much as those stakeholders inside the system (Miller, Acutt & Kellie 2002; Ridoutt et al. 2002b). Instead, large and small employers are seeking outcomes from training (and assessment) consistent with the perception of their business needs and also information relating to how competence contributes to satisfying those needs (including minimising risks).

Training decisions are made often in complex contexts, with limited support information. They are frequently made with short-term (even immediate) ends in mind, but even then, more strategic company and industry outcomes are likely to be under consideration as well (Dockery et al. 1997).

Discussion and findings

This chapter presents an analysis of the findings of the surveys along with a discussion of the implications of the findings. Five main conclusions are drawn from the survey analysis.

What is a qualification?

In much of the literature, the term ‘qualification’ is used by authors as though its meaning was universally understood. However, studies of employers in particular indicate that no such consensus in perception can be assumed (Ridoutt et al. 2002b). A standard yet broad definition of the term ‘qualification’ is that it is a quality or accomplishment attached to a person, and is generally considered a condition that must also be fulfilled before an ‘office’ can be acquired or held. Standard definitions allow that this may also imply documentation attesting to the fulfilling of the conditions. Indeed authors in the VET literature are increasingly making documentation an integral characteristic of a qualification (Sargent 1998).

As the aim of the study was an examination of the valuing of qualifications, it was appropriate to first look at what the sample population of employers regarded as a qualification. The great majority of respondents were in agreement that the presence of a ‘qualification’ is almost always signified by some form of documentation.

Not surprisingly, technical and further education (TAFE)/registered training organisation certificates and diplomas and university degrees topped the list of recognised qualifications (figure 1), although these were not universally accepted. It should also be noted the extent to which a range of other ‘qualifications’ were acceptable, with even certificates of attendance considered a ‘qualification’ by 34% of respondents.

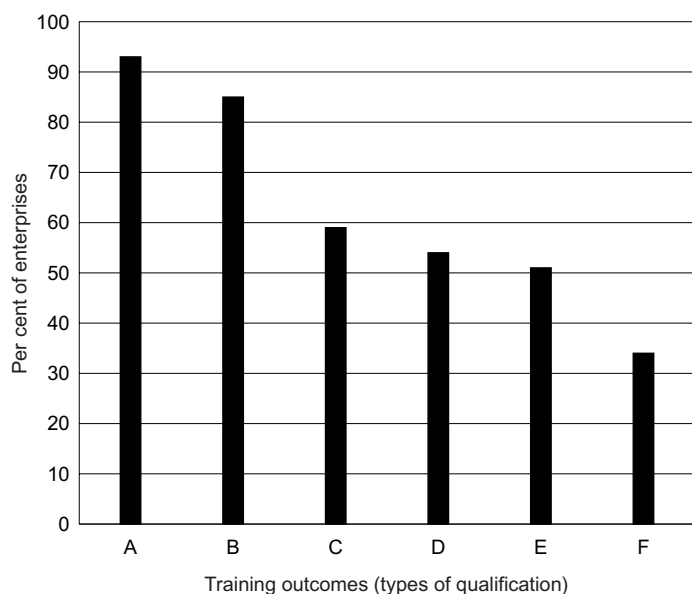
Only 9% of the employers surveyed in this study identified ‘extensive experience’ or other non-documented forms of accomplishment as a qualification. However, the type of documentation recognised varies. The great majority of employers regard university degrees and VET institutionally conferred documents (such as statements of attainment, certificates, diplomas etc.) as qualifications. There is much more equivocal acceptance of other pieces of paper, such as licences and ‘tickets’ (59% of respondents), certificates of school level achievement (54%) and industry training awards (51%). This of course varies between employers, since there are pockets of industry where, for instance, industry awards would be recognised by 100% of employers, such as the Professional Association of Diving Instructors certificate or information technology vendor training.

It is possible that survey responses did not provide an absolute assessment of each potential option for qualification status, but rather a relative rating or valuing of qualifications. This might suggest that achievement of standards of competence, attained and recognised almost entirely on the job, would not be as readily accepted as qualifications as those attained and recognised through mainly off-the-job effort, especially if from a more esteemed external institution. This would also apply to apprenticeships where the off-the-job component lends credibility. (Should this be the case, we hypothesise part of the supposed flexibility inherent in the design of training packages may be lost if industry reverts to an institutionally based training and qualifications pathway.)

When exploring reasons why university and registered training organisation qualifications were not accepted, the telephone survey (n=69) responses centred on a common theme: if the training outcome was not relevant to the job, it was not regarded as a ‘qualification’ *by the organisation*. This can be illustrated by the following comments: ‘[Degrees] are not necessary—in our industry they are not essential’ and ‘[Degrees] are not needed for our organisation because they are not helpful for what we do’.

For the sake of clarity in the research, respondents were asked to apply the term ‘formal qualification’ to mean qualifications issued by both university and registered training organisations for the remainder of the survey.

Figure 1: Percentage of employers who accepted the training outcome was a ‘qualification’



Notes: Key to training outcomes (n=150)
 A = TAFE, RTO or equivalent and trades qualifications certificates, diplomas, advanced diplomas
 B = Degrees conferred by a university or equivalent
 C = Licences, 'tickets', etc provided by non training bodies
 D = Certificates of school achievement
 E = Industry training awards
 F = Certificates of attendance or other recognition provided for participation in a course
 TAFE = technical and further education; RTO = registered training organisation

Do employers value qualifications?

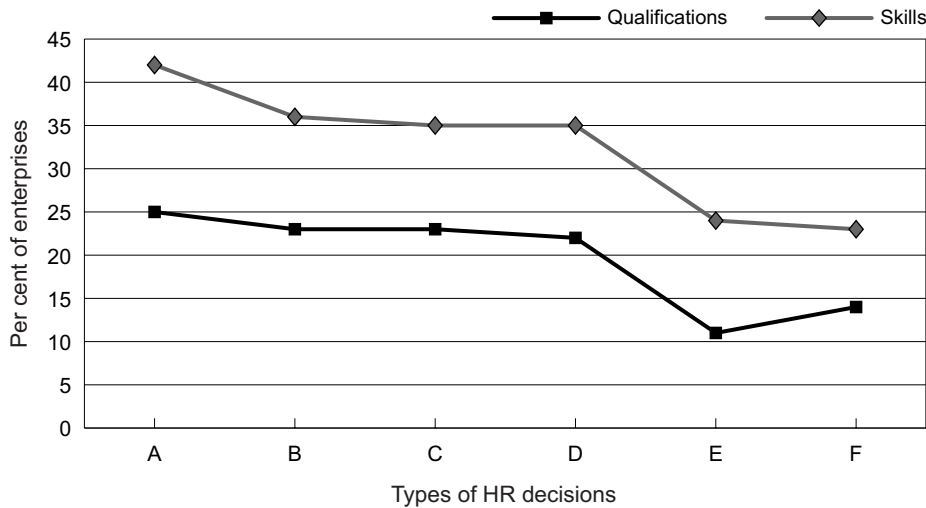
Clearly employers do value qualifications. This is supported by the finding that just on one-quarter of the respondents (for the paper survey) considered that all their employees should have appropriate qualifications. However, the same statistic also indicates that for the majority of employers this is not an unconditional valuing of qualifications. It is tempered by the context in which the worth of a qualification is being judged.

In this sense, employers draw a strong distinction between qualifications and experience. The term ‘experience’ here almost universally equates to skill, forged over a significant period of time in relevant workplace circumstances. Illustrative of this manner of thinking, one employer offered:

Skills and formal qualifications are two different things. Qualifications require documented evidence, while skills must be proved evidence. For some managerial positions, qualifications are an absolute pre-requisite. As we work with people with disabilities, the personality of the employee is also very highly considered. The skills, qualifications and competencies required are noted on the job descriptions.

Most respondents rated skills/experience higher than qualifications in a majority of decision-making contexts. For instance, in managing their number one risk, 72% of employers believed skills were critical, but only 36% believed qualifications were a critical control measure. Another example is the greater proportion of enterprises ascribing high importance to evidence of skills, by contrast with qualifications, in much human resource management decision-making (see figure 2).

Figure 2: Proportion (%) of enterprises who identify skills and qualifications as very important in selected human resource management decisions



Notes: A = Plan for the current and future skill needs of the organisation
 B = Recruit/select new employees
 C = Comply with relevant occupational health and safety laws
 D = Plan training and ensure employee competence
 E = Make promotion decisions
 F = Determine levels of remuneration and other benefits

The explanation for this difference could be found in the qualitative research findings of Ridoutt et al. (2002b). They identified that employers focused on a comparatively small number of critical competencies, which could be those skills most important in controlling their primary business risks. Thus, employers at best value ‘part’ qualifications, that component which delivers the *skills* they value.

In those business circumstances where qualifications are less valued than the notion of ‘skills’, what services and products can VET offer that would assist enterprises to make better decisions? If experience and skills are valued, how can VET assist in objectively measuring the level of skill actually possessed? The answer to these questions may sit easily within a training package framework, but may require quite a different marketing and implementation approach.

Variations within enterprises in perspectives

Who requires a qualification?

The hypothesis that qualifications might be more or less valued for different employees was tested by asking employers to:

- 1 Generate any categories of employee which have different requirements for skills and qualifications (telephone survey only).
- 2 Rate the importance of formal qualifications for each occupational group in their organisation (all respondents).

Employers gave a wide range of responses. However, the most common response was that qualifications depended on the job level or work done, for example:

It depends on the job description for that particular position.

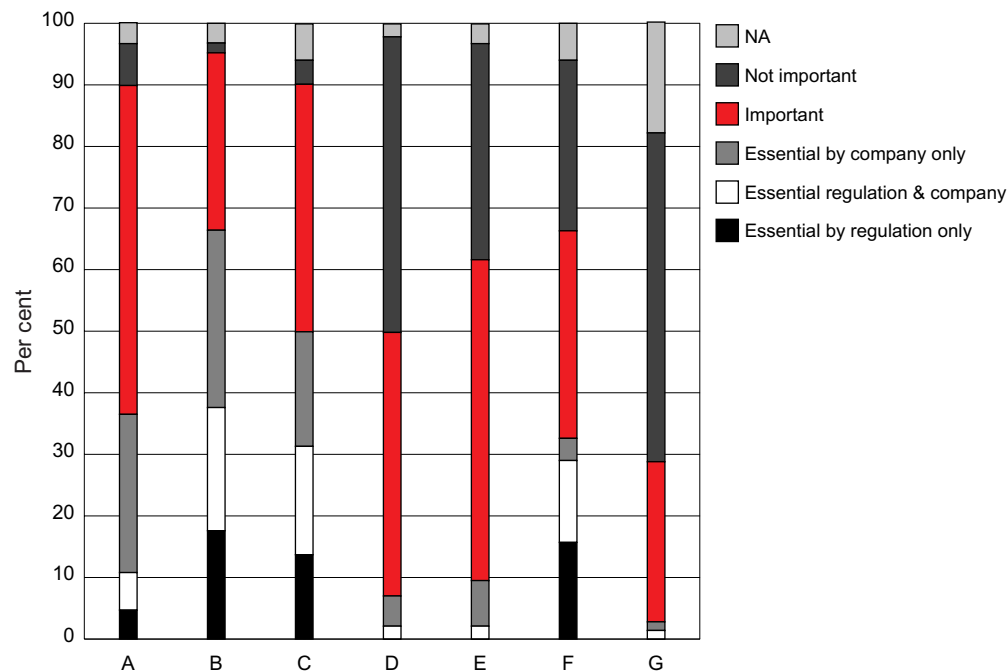
Within enterprises, even those which advocate that all employees attain qualifications, there are equally noteworthy differences in the way qualifications are valued—according to the different human resource and business circumstances that arise. The three main circumstances investigated in this study where qualifications might be differently valued were:

- ✧ in relation to different categories of employee
- ✧ for different types of human resource management decisions
- ✧ in managing different risk situations.

Influence by type of employee

Figure 3 supports the intuitive understanding that employers differentiate the importance of qualifications for different categories of worker. The survey found that over 89% of respondents classified formal qualifications as important or essential for technical, professional and managerial staff: 60–67% for operators, drivers, sales and clerical staff, contrasting clearly with labourers (29%). The same pattern applies in reverse, with over 50% of respondents for labourers, but less than 10% for technical, professional and managerial staff considering formal qualifications ‘not important’ (figure 4).

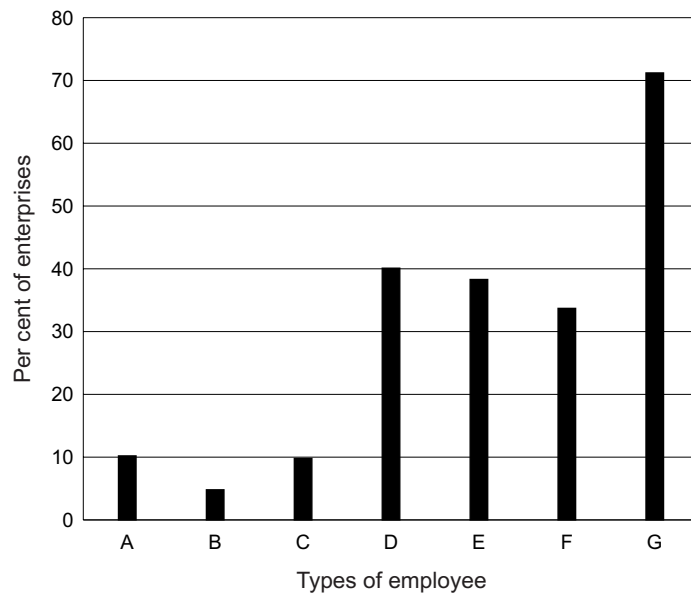
Figure 3: Importance of formal qualifications for different occupational groups (n= 150)*



- Notes: A = Managers and supervisors
 B = Professionals
 C = Technical support
 D = Clerical and administration
 E = Sales and related services
 F = Plant and machine operators and drivers
 G = Labourers

The rating choices were: essential (required by regulation); essential (required by company policy); important/very important; and not important. The first two items were included to cover the possibility that for some categories of employee, a major driver of qualifications was government legislation.

Figure 4: Proportion (%) of enterprises who do not see qualifications as important for different employee categories



Notes: A = Managers and supervisors
 B = Professionals
 C = Technical support
 D = Clerical and administration
 E = Sales and related services
 F = Plant and machine operators and drivers
 G = Labourers

These results fit neatly with the findings of a survey of British employers (Miller, Acutt & Kellie 2002) which asked employers to define the minimum preferred entry requirements for a range of job categories consistent with those in this study. Table 1 shows the proportion of respondents in this current study who did not see qualifications as important by contrast with Miller et al’s findings where the minimum preference was ‘no qualification’.

Table 1: Proportion of employers who did not consider qualifications important, comparison with Miller et al. (2002)

	Current study	Miller et al. (2002)
Managers and supervisors	7%	10%
Professionals	2%	8%
Technical support people (trades staff)	4%	12%
Clerical and administration	38%	38%
Sales and related services	35%	35%
Plant and machine operators and drivers	28%	71%
Labourers (unskilled) workers	53%	93%

Interestingly, the relatively high proportion of ‘essential’ responses (32.6%) for operators/drivers to be qualified contrasts with sales, clerical and labourer staff (<10% each), although the breadth of what respondents considered a qualification needs to be borne in mind. For this category of operators/drivers, regulatory requirements was the reason given for the greatest proportion of responses, supporting the idea that legislative requirements are a key driver for formal qualifications in some, but not all, occupational groups.

It is difficult to know whether, a decade ago, a similar response to the above would have been obtained from a cross-section of Australian employers. For instance, would nearly 70% of relevant employers have indicated that qualifications *are* important for plant operators (see for example,

Curtain 1994)? It is possible that the focus on industry training initiated by the Australian Government in the late 1980s and pursued with vigour through VET could indeed have had a long-term influence on the thinking of employers, and what they perceive to be appropriate behaviour when entering the training market.

Influence on types of human resource management decision

There is a clear and significant difference in the way employers perceive the importance of qualifications when making human resource management decisions. The relative weight placed on qualifications in different human resource management decision-making processes is illustrated in table 2 and figure 5.

Perhaps employee qualifications are utilised as a human resource management tool, rather than for the knowledge and skills that they indicate. Employers used formal qualifications to plan for future skill and training needs and recruit new employees (about 90% of respondents) and to ensure regulatory compliance and selection for promotion (around 80%). Remuneration decisions and creating employee loyalty were somewhat less important.

Table 2: Importance of formal qualifications for different human resource management decisions

Types of human resource management decisions:	Very important	Important	Not important N/A
To plan for future skill needs of the organisation	31%	56%	13%
To recruit/select new employees	34%	55%	11%
To comply with relevant occupational health and safety laws	32%	43%	25%
To plan training and ensure employee competence	32%	49%	19%
To make promotion decisions	17%	55%	27%
To determine levels of remuneration and other benefits	17%	50%	33%

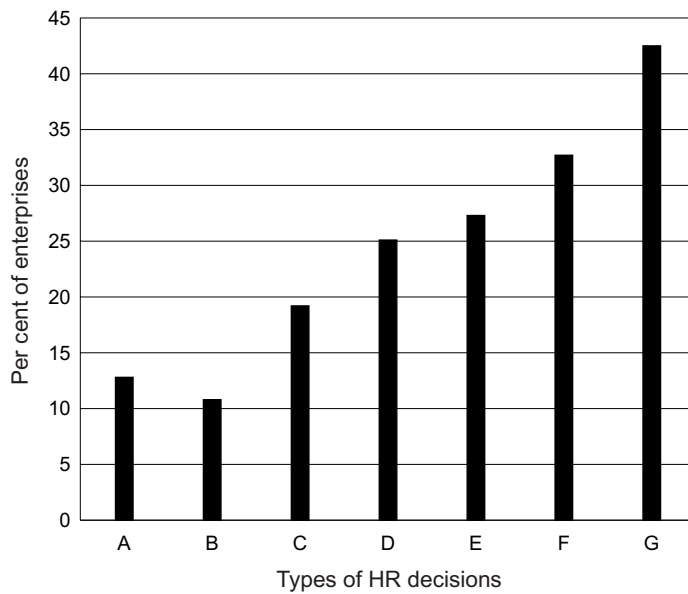
A distinction between ‘external’ and ‘internal’ human resource management decisions was made by focus group discussion participants and persons interviewed. Planning for an enterprise’s labour requirements and scanning the labour market, and then recruiting to meet requirements, are ‘external’ human resource management decisions, since they involve engagement with forces and systems outside the enterprise. It was suggested that qualifications are most important in actions at the interface between an enterprise and the external labour market, since they offer a more stable form of ‘currency’ which provides the decision-maker some information in a potentially information poor situation (see also Keating 2002).

The results in table 2, which show that qualifications are considered important or very important by just under 90% of respondents in making human resources planning and recruitment decisions, tend to support the qualitative findings.

The most common circumstance where qualifications might be valued is at the point of recruitment. However, focus group and interview respondents warned that this may only be for some occupations, and even then only as one component among a range of selection criteria. The importance is also influenced by the stage of career of the persons being recruited—persons employed later in their employment career will be judged more on experience and skills than qualifications (see, for instance, Wooden & Harding 1997).

The focus group and interview respondents also warned about the need to avoid mixing training and qualifications, since one might be valued, but not the other. Also, from an employer’s perspective, it was generally felt that the concept of ‘skills’ was better understood and was more useful than that of ‘qualifications’. This was also a common theme in open responses from surveyed enterprises. In a tight labour market, skills were generally contended to be more important than qualifications.

Figure 5: Proportion (%) of enterprises who perceive qualifications as not important in supporting different human resource management decisions



Notes: Key to types of human resource management decisions
 A = to plan for future skill needs of the organisation
 B = to recruit/select new employees
 C = to plan training and ensure employee competence
 D = to comply with relevant occupational health and safety laws
 E = to make promotion decisions
 F = to determine levels of remuneration and other benefits
 G = to promote worker loyalty and commitment and reduce staff turnover

What type of experience or skill is valued?

Often, the skills most valued are those that have been termed ‘employability skills’ (such as attitude, language and literacy, communication abilities and team work) or ‘generic skills’ in recent NCVET research (Clayton et al. 2003). Most employers included in the qualitative research effort found it difficult to articulate what skills they took into account. Experience identified as important included: staff leadership; team skills; communication skills; business leadership; capacity to offer pastoral care; willingness to learn; and capacity to cope with change. The desirable characteristic ‘attitude’ was frequently mentioned, and variously translated as ‘being progressive’, ‘positiveness’, ‘appearance’, ‘at least making an effort to understand and adjust to company norms’, ‘confidence’, ‘demonstrations of commitment’ and ‘wanting to do the job, wanting to be there’.

Risk management and qualifications

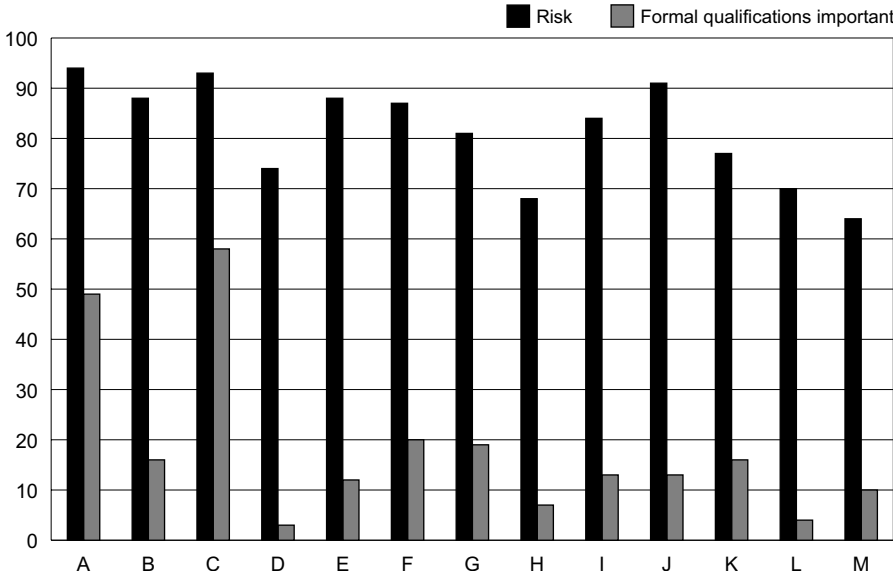
A possible reason why employers value formal qualifications is that they provide an objective, externally validated form of assessment of knowledge and/or skills. It was hypothesised that these qualities may influence employers to seek formal qualifications for those staff who manage high-risk areas of their enterprises. Focus group discussion participants and interviewees broadly agreed with the concept that employers are continually assessing the risks of incomplete competence and making judgements on a worker's need for, and level of competence vis-a-vis some type of risk to an enterprise. At a simple level for instance, it was pointed out that most employers assess the competence of workers (if only informally), and on this basis, allocate the more ‘crucial’ jobs/tasks to selected, highly competent employees. In this sense, one interviewer wished to describe this process more as ‘evaluation’ than assessment, the evaluation being of the ‘level of performance’ or ‘the contribution to business goals’.

The paper survey asked organisations to generate three of their most critical business risks. A list of the most frequently identified risks identified was incorporated into the subsequent telephone survey. These risks were:

- ✧ non-compliance with legislation/government requirements
- ✧ insufficient insurance
- ✧ occupational health and safety compliance
- ✧ loss of contract/funding
- ✧ loss of client/customer base
- ✧ loss of core knowledge/skilled personnel
- ✧ quality of product (or service)
- ✧ obsolete technology
- ✧ risk to professional reputation/standing
- ✧ risks to competitiveness
- ✧ critical incidents
- ✧ supply chain disruptions, failure/absence of critical machines or processes.

The risks were generally accepted by the telephone survey respondents as appropriate to their situations, with between 64% and 94% of the sample identifying each risk as pertinent to their enterprise (figure 6 and table 3). The results also demonstrate that, in our sample, different types of risk call for quite different training and experience requirements. The figure below shows the percentage of respondents who acknowledged the identified type of risk in their organisation, the extent to which it was viewed as critical, and the importance of training or experience or formal qualifications in managing high risks.

Figure 6: Importance of training or experience in managing risks



Note: For categories of risk see table 3.

Table 3: Proportion (%) of organisations identifying item as risk/high risk, and importance of training or experience and formal qualifications in managing those risks

Risk legend	Type of risk	Risk	High Risk	Training or experience important	Formal qualifications important
A	Non-compliance with legislation/government requirements	94	74	70	49
B	Insufficient insurance	88	58	42	16
C	OHS compliance	93	67	65	58
D	Loss of contract/funding	74	28	19	3
E	Loss of client/customer base	88	55	41	12
F	Loss of core knowledge/skilled personnel	87	38	33	20
G	Quality of product (or service)	81	42	42	19
H	Obsolete technology	68	17	14	7
I	Risk to professional reputation/standing	84	43	38	13
J	Risks to competitiveness	91	35	29	13
K	Critical incidents	77	38	33	16
L	Supply chain disruptions	70	23	13	4
M	Failure/absence of critical machines/processes	64	25	22	10

When considering the four items identified by over half the respondents as high risk, it can be seen that there are marked differences between the perceived value of training and experience in managing each risk. Respondents identified at least two broad areas of risk that employers would consider important to consider when deciding on levels (and rigour of assessment) of competence. These are:

- ✧ ‘compliance’ risk, for instance, in the area of occupational health and safety and accounting, and any other areas of practice governed by regulatory requirements
- ✧ ‘business’ risk, for example, potential loss of income or profit because of factors, such as poorly made products, badly delivered services, poor customer service, loss or theft of stock, and wastage of resources.

In 49% and 58% of cases, organisations reported formal qualifications as important for legislative and occupational health and safety compliance risks. This figure was only 16% and 12% respectively for the next most highly ranked risks, insufficient insurance and loss of client or customer base. Training—and formal qualifications—are often a mandated means of compliance for risks related to legislative requirements (providing a logical reason for this finding). However, the results do not support the idea that qualifications are generally seen by the respondents as the most efficient way of controlling business risks.

Telephone participants were also asked if formal qualifications were more important for people dealing with high-risk areas (irrespective of the specific risk) and reasons for their answers. Sixty-one per cent of respondents stated that formal qualifications were more important—a higher percentage than may have been inferred from table 3. Some of the qualitative reasons why formal qualifications were favoured focused on specific knowledge gained (‘expertise and knowledge’) and the qualities a qualification was thought to demonstrate (‘dedication’, ‘methodical’, ‘breadth and depth’, ‘ability to think outside the square’), while others indicated that potential litigation, liability and regulations were key drivers of this response.

For the 39% of respondents who believed formal qualifications were not more important, almost half the comments mentioned the importance of experience in place of, or in conjunction with qualifications. Other reasons offered tended to focus on attitude.

It was suggested that risk aspects are generally assessed at the enterprise level, since this is where the impact on profitability is likely to be measured. However, it was noted that it could well vary between different types of enterprise; for example, it might be different in public sector, religious, voluntary or charitable organisations compared with private sector enterprises operating on a for-profit basis. The respondents also noted differences by size of enterprise, suggesting that larger organisations tend to assess risks at unit or even job levels, and differ from small and medium enterprises in this respect. This aspect may warrant further attention.

Risk management and assessment

Also explored in the paper survey were the methods of assessment used by organisations for employees where worker skill or competence is important to minimising a substantial risk to the organisation.

Table 4 shows that respondents favoured both unstructured and structured formal assessment (essentially ‘in-house’), but that only around a third of organisations used some form of external assessment. (This is still double the proportion reporting no assessment takes place.) Clearly many respondents use more than one type of assessment, depending on the situation.

Table 4: Type of assessment of skills for employees in managing high risk areas

Type of assessment used	% respondents (n=81)
No assessment	14
Unstructured assessment	70
Structured formal assessment	58
External assessment	36

Note: Respondents could give more than one answer.

This compares with the result from the telephone survey participants, where just under half (47% of respondents) reported that formal or external assessment of skills was more important for staff in high risk areas.

It appears that almost half of the respondents practise some form of risk management with their selection of assessment methodology, and that formal qualifications might be part of their risk control approach.

The qualitative data suggest a range of reasons. One reason is simply that high-risk areas often attract greater regulatory compliance obligations and this is one way of demonstrating that the required competency issues have been addressed. Others, however, took the view that higher risks require greater certainty that the required competencies are held.

Those respondents who did not engage in such risk management believed that their existing systems were adequate and that additional processes for assessment in high-risk areas were not warranted. Some respondents were also of the opinion that their own internal assessment procedures were more relevant to their needs than would be those of an external body.

Variations between enterprises in perspectives

Enterprise size

A review of the literature appears to indicate that smaller-sized enterprises are less likely to value qualifications than the larger enterprises (Hayton et al. 1996; Ridoutt et al. 2002a).

A possible explanation for smaller enterprises being less keen to embrace qualifications is that the competence of each employee is well known to senior management; hence they do not require a

formal or external grading. On the other hand, large companies, it might be postulated, support a comprehensive approach to worker qualifications for a number of reasons, the predominant ones being:

- ✧ to facilitate harmonious employee relations (Ridoutt et al.. 2002b)
- ✧ to enhance communication between workers through more shared terminology
- ✧ to construct and give momentum to a learning organisation culture
- ✧ to develop the enterprise's 'intellectual capital', which can have short-term benefits in the share market (Sexton 2003), or possibly longer-term benefits in financial performance (Department for Industry, Science and Resources 2000).

The reluctance of smaller enterprises to unconditionally embrace qualifications need not be interpreted as a wholesale disregard of the place of qualifications. On the contrary, as with other areas of training and learning effort (Gibbs 1999; Smith 1997), small businesses simply appear to be more pragmatic in their investment decision-making. They prefer a closer correlation (in time) between the investment and the return.

The sample population was asked whether they believed all employees should hold an appropriate formal qualification. An apparent divergence between enterprises of different size emerged from the responses, with respondents from larger enterprises tending to be more in favour of a 'blanket' support for employees holding qualifications. The difference was statistically non-significant. The relative support for qualifications is demonstrated in figure 7. Interestingly, the proportion who preferred all workers to hold an appropriate qualification was less than 40% for the largest enterprises and less than 25% for the remainder.

Figure 7: Proportion (%) of enterprises in each size category who prefer all workers to hold an appropriate qualification

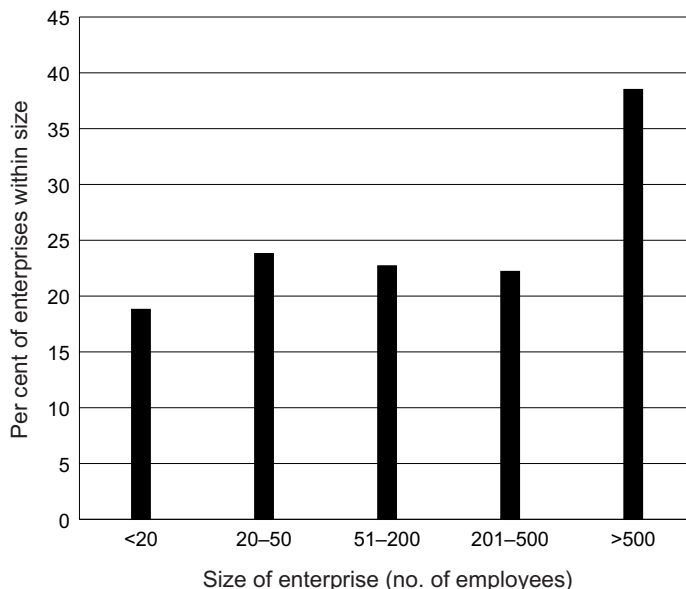
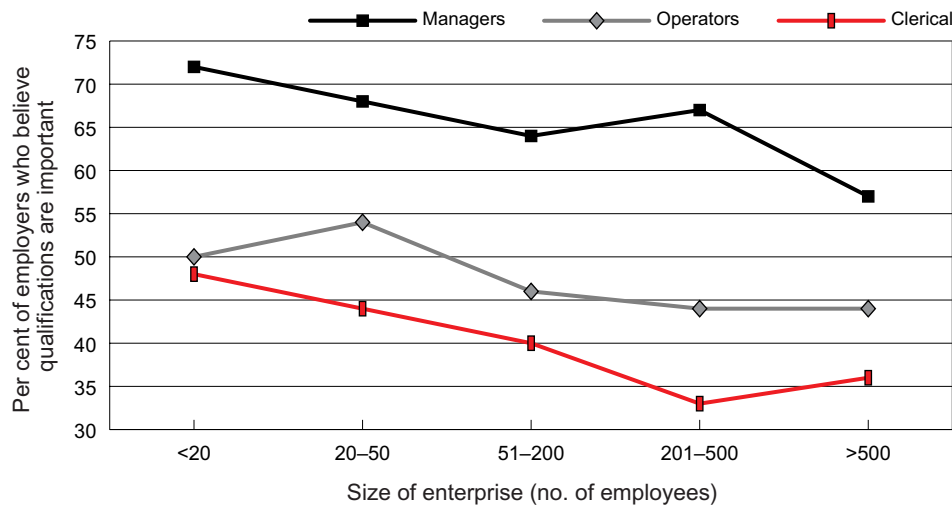


Figure 8 shows the way enterprises of different size rate the importance of qualifications for selected employee categories. In these employee categories (managers, clerks, plant operators) small businesses are generally just as interested (if not more) in their employees holding qualifications as larger enterprises.

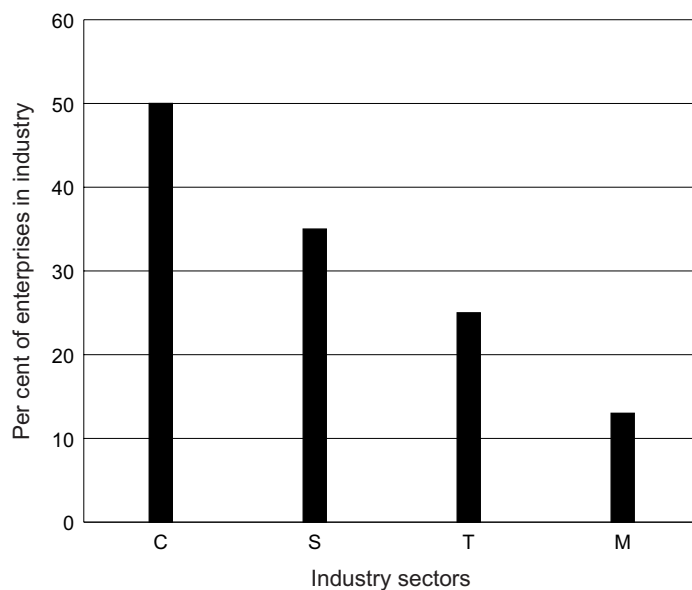
Figure 8: Proportion (%) of employers who believe qualifications are important to be held by their employees by type of employee occupational category



Influence of industry

There are seemingly distinct (yet statistically non-significant) differences between industry sectors in the proportion of respondents who indicate all employees should have qualifications. Figure 9 shows once again a reluctance to commit to a 'blanket' preference for qualifications for all employees can be attributed simply into an industry sector discriminating sensibly and rationally in relation to their investment in particular worker categories and their learning outcomes. The construction industry appears to be most in favour of qualifications, possibly reflecting the increasingly regulated nature of that industry and building on a strong base of tradespersons. At the other end, the respondents in manufacturing are more circumspect in relation to the need for qualifications, with only 13% believing that all workers should possess relevant qualifications.

Figure 9: Proportion (%) of enterprises from different industry sectors who prefer all employees to possess qualifications



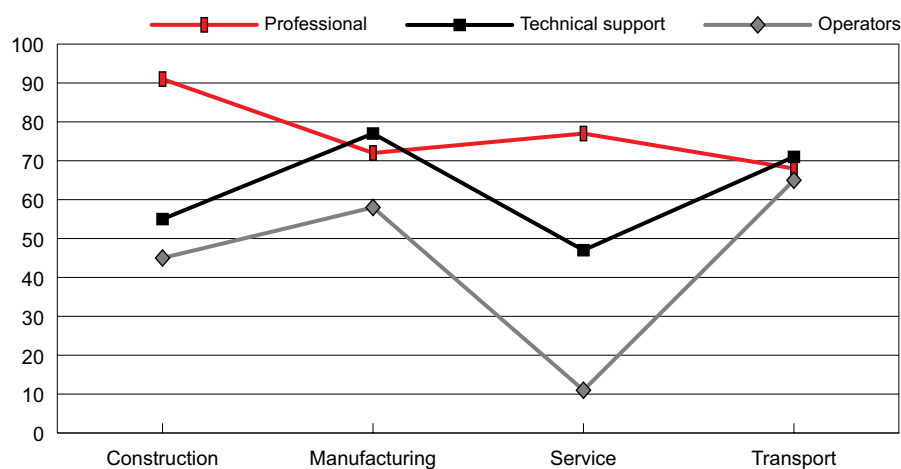
Note: C = construction; S = service industry; T = transport industry; M = manufacturing

Figure 10 shows different industry sector perspectives on the importance of qualification outcomes for selected categories of employees. For example in the service industry sector, nearly 80% of

service industry enterprises identified qualifications as at least important for professionals, but only 47% and 11% of enterprises believed that qualifications were important for technical support and operator personnel, respectively. On the other hand, as one might expect, the highest proportion of enterprises in the manufacturing industry perceiving qualifications to be important did so in relation to technical and trades workers.

Despite the comforting idea that enterprises generally act rationally in their valuing of qualifications, what is interesting is that only 55%, 77%, 47% and 71% of construction, manufacturing, service and transport sector enterprises, respectively, believe a qualification for their tradespersons and technical support employees is important. There is no obvious difference between these enterprises and those that did not consider a qualification was important on a range of enterprise characteristics.

Figure 10: Proportion (%) of enterprises in different industry sectors identifying qualifications as important or critical for selected worker categories



Other influences

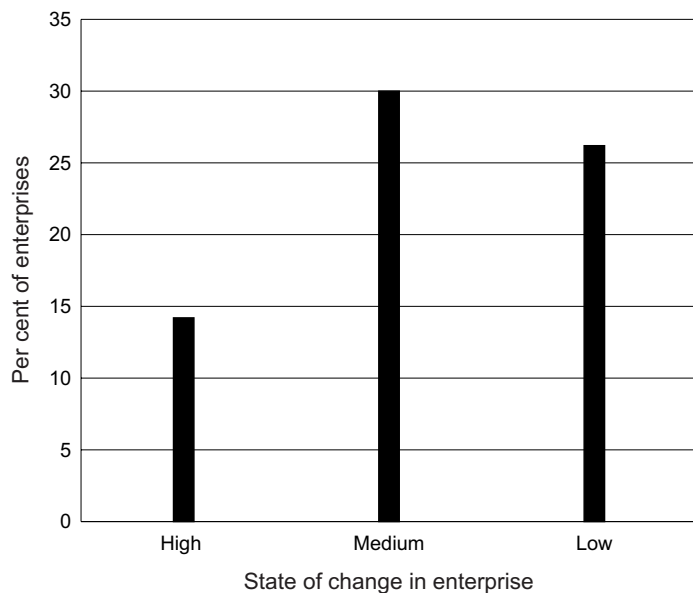
Some interview subjects believed that the traditional ways of separating industries into sectors was not conducive to analysis. They felt a more useful approach might be to classify enterprises into two categories; namely, 'old' economy and 'new' economy, which could be differentiated as follows:

- ✧ *old economy*: the traditional ways of operating have probably not changed means and processes of production for many years. In this case, factory floor training is perceived to add little value to the business's bottom line, since stable (and competent) staff are already in place. Training therefore would be targeted at management, where there was perceived to be a higher value-adding opportunity.
- ✧ *new economy*: these are innovative enterprises, where the processes of production are still evolving. In this case, less structured and formal (but appropriately timed) training was argued to be important, very specific to jobs/tasks, and targeted across the workforce.

The literature suggests that if an organisation is undergoing some form of change process it is more likely to be open and receptive to the need for training (for example, Smith & Freeland 2002). Hayton et al. (1996) identified particular sources of change they believed resulted in increased training effort (for example, change in products and services, change in technology of production), but Ridoutt et al. (2002a) found that the effects on training effort could result from less specific agents of change. They found, for instance, that organisational changes (for example, restructures, downsizing, mergers) could be instrumental in stimulating a growth in training effort. While the literature has less to offer on degree of innovation, there is an implication that highly innovative enterprises would behave in a way similar to those enterprises in a state of change.

In this study, enterprises were classified into three categories of states of change—low, medium and high. The relationship between state of change of an enterprise and the desire for employees to hold qualifications is shown in figure 11.

Figure 11: Proportion (%) of enterprises in different states of change who prefer all employees to possess qualifications



Contrary to what one might expect, organisations in a high state of change (both organisational and technological) did not indicate a higher preference for all their employees to hold qualifications than those undergoing less change. In fact, the reverse situation held, although the difference is not statistically significant.

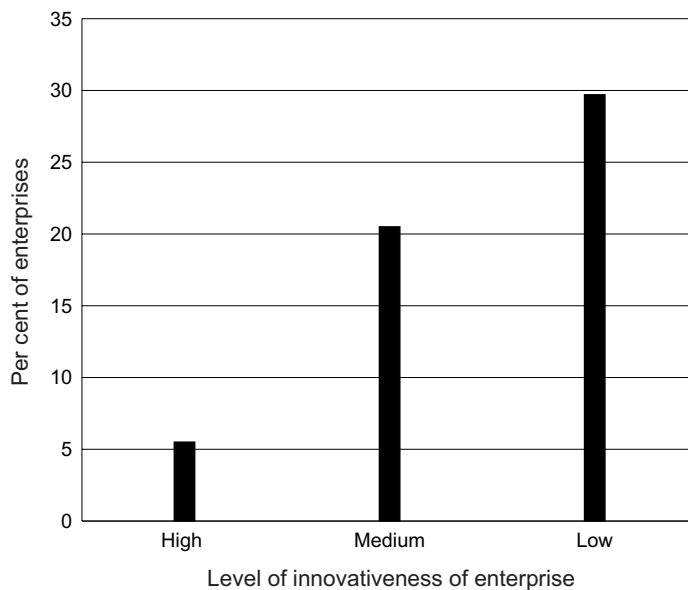
Interestingly, a similar relationship holds for enterprises in terms of their degree of innovation capacity (see figure 12), although again this relationship is not statistically significant. Highly innovative enterprises appear not to value qualifications, at least insofar as indicating a preference for all staff to hold an appropriate qualification, certainly not to the extent as enterprises whose level of innovation is designated medium or low.

The results indicate that high-change and high-innovation enterprises do tend to act similarly, but in a way at odds with what might have been expected. Conventional wisdom presumes that enterprise innovation and change are generally associated with the new knowledge-based industrial effort, which, it would be expected, is supported by broad human capital investment (evidence of which would be high proportions of appropriately qualified staff [OECD 2002]). The findings from this study suggest the reverse.

The qualitative data from the interviews and focus group discussions suggest a way to reconcile the difference between expectation and observation. Innovative enterprises tend to be part of the new economy—where the processes of production are still evolving. Here, less structured and formal (but appropriately timed) training, very specific to jobs and tasks, could be argued to be most important. It is a ‘just in time’ approach to training and learning, which fits the development of skills to the pace of organisational change and forward progress (see Burke et al. 1998).

Moreover, leading edge enterprises tend to be the knowledge-makers, and hence they may be less able to benefit from formal VET qualifications (Long & Fischer 2002). The relationship could, indeed, be quite the opposite, with those designing qualifications and constructing courses likely to be the beneficiaries of the exploration and knowledge generation activities of the innovation enterprises.

Figure 12: Proportion (%) of enterprises at different levels of innovativeness who prefer all employees to possess qualifications



Conclusion

There appeared to be five main conclusions from this study.

First, while 90% of the employers surveyed valued qualifications in at least one area in managing their business, less than a quarter treated qualifications as something to be appreciated without question. Respondents tended to ascribe value to qualifications insofar as they supported business decision-making or operations and added to the security and prosperity of the enterprise. The respondents also differentiated between areas where they saw greater or lesser benefits accruing from their employees holding an appropriate qualification, and they made a strong distinction between qualifications and experience, with the latter tending to be more valued over a wider range of business circumstances.

The second conclusion is that the employers who responded used qualifications differently by type of employee, nature of human resource decisions, and the type of business risk they were attempting to manage. These relationships were probably influenced by a range of enterprise characteristics, such as their size and state of change or innovativeness. Ninety per cent of the respondents accepted the importance of qualifications for professional, technical/trades and managerial employees, compared with 60 to 70% for operators and drivers, sales and clerical staff, and 30% for labourers. Formal qualifications were used most often to plan for future skill and training needs, recruit new employees and ensure regulatory compliance. Other types of human resource management actions, such as remuneration decisions and creating employee loyalty, were less influenced by qualification considerations. While compliance risks and business risks were both considered important by the respondents, they tended to argue that the former were better controlled by a qualification or through skills development, whereas the latter were more likely to require other approaches.

Thirdly, the larger enterprises tended to support a more comprehensive approach to worker qualifications, perhaps to develop harmonious employee relations, a learning culture and the enterprise's intellectual capital. The smaller businesses tended to be more discriminating when assigning worth to qualifications and preferred a close correlation in time between the investment of resources and the returns to the business. Interestingly, industry sector did not seem to have a significant influence on the way the respondents valued qualifications among their employees.

Classifying enterprises into 'old' economy and 'new' economy businesses helped to explain the relationships found in this study between the level of change and extent of innovation of enterprises and their valuing of qualifications, and constitutes the fourth conclusion. The study findings suggest that high levels of enterprise change and innovation are associated with lower support for the value of qualifications. Perhaps the explanation is that these conditions translate into a demand for more 'just in time' skills development, while the pursuit of qualifications is more long-term and strategic.

Finally, while a small proportion of the respondents, below 15%, consistently valued skills and experience above qualifications, a similar proportion of respondents believed strongly in the value of qualifications as such. The remaining respondents, that is, the majority, valued qualifications, but conditionally, based on the circumstances facing their enterprise. From the perspective of VET policy, planning and implementation, there is a challenge to ensure that the complexity of circumstances and options that confront individual enterprises finds an appropriate match in the array of training products and services.

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This report is about employers and how they value and use qualifications in their business decisions. The research indicates clear differences in the value placed on, and use made of, qualifications by employers for different groups of workers and occupations. Qualifications are considered more important for higher-level occupations and employers use them predominantly to recruit new employees and to ensure regulatory compliance. Employers regard qualifications as a signal of potential for future learning and skills acquisition, not as a signal of immediate competence. Overall, employers drew a strong distinction between qualifications and experience and favoured and valued the latter more in regard to many of their business decisions. The higher the level of enterprise change and innovation, the lower the level of value and use made of qualifications by employers. Also, small enterprises are more likely to be highly discriminating of qualifications and supporting development among their employees.

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