

Reasons for training: Why Australian employers train their workers

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About the research



Reasons for training: Why Australian employers train their workers

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Charles Sturt University

Irrespective of whether a country's economy is prospering or experiencing a downturn, employers can benefit from a skilled workforce able to respond to changing economic circumstances. Training their workers is one means of building such a workforce.

But what influences the decisions by employers to train their workers? This report examines this question through a statistical analysis of data from the National Centre for Vocational Education Research (NCVER) 2005 Survey of Employer Use and Views of the VET system. The authors look at the decisions made by employers in relation to four different types of training: vocational qualifications; the employment of apprentices and trainees; nationally recognised training; and unaccredited training.

Key messages

- The need for skills, whether specific to a particular job or general skills upgrading, is a pivotal driver of vocational training by employers. Compliance with regulation is also a factor.
- The study isolated three factors that powerfully influence decisions about training: the overall importance of training to the organisation; the level of workforce skills in the organisation; and recruitment difficulties.
- Training is being integrated with other human resource objectives in some organisations. In light of this, training providers need to take a more business-oriented approach with the organisations.

The authors argue that decisions about training are quite complex, and therefore governments need to be wary of one-dimensional approaches—such as training levies—to increasing employer investment in training.

Tom Karmel
Managing Director, NCVER

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Executive summary

Employers play a critical role in the national vocational education and training (VET) system as the ultimate users of the skills developed through training. However, little is known about how training operates within organisations. National collections of statistics in Australia and overseas have produced evidence of the scale of employer expenditure on training and what training employers provide for their workers. However, how employers make decisions about training remains something of a ‘black box’. Previous research has shown that the reasons are often unique to the organisation (Smith & Hayton 1999).

This study is an attempt to identify how employers make decisions about training. To do this we analysed the data produced by the National Centre for Vocational Education Research (NCVER) in its biennial Survey of Employer Use and Views of the VET system (SEUV). The survey asks employers about their use of and satisfaction with four forms of VET—vocational qualifications, apprentices and trainees, nationally recognised training and unaccredited training—and a number of supplementary questions relating to the employers’ skills and training strategies. A total of 4601 employers were interviewed in the 2005 survey.

While the specific objective of the research was to identify the reasons why employers provide different forms of training to their workers, we also wanted to gauge the effect of the organisation’s characteristics on their decisions to provide training. Complex statistical data analyses were undertaken and involved two processes. In the first process a cluster analysis of the reasons given by employers for providing the different forms of training was carried out. Although employers gave multiple reasons for providing training in the survey, these were not ranked according to their importance to the employer. The clustering allowed us to determine the major reasons for providing the different forms of training. The second process involved statistical modelling of the reasons given by employers against various organisational characteristics such as size, industry sector, whether training appeared in the business plan and skills level of the workforce.

Findings

Each of the two data-analysis processes—cluster analysis and statistical modelling—examined reasons for employers’ choice of various types of vocational training for their organisation, specifically: vocational qualifications, employing apprentices and trainees, nationally recognised training and unaccredited training. The following summarises the reasons for employers adopting each of these categories of training.

Vocational qualifications

Those employers who make use of vocational qualifications for their employees do so for the following reasons.

- ✧ These qualifications are primarily used to provide skills for certain jobs.
- ✧ Vocational qualifications are used to comply with external regulations (such as licensing requirements) or internal regulations (such as the provisions of industrial agreements) or professional or industry standards.

- ✧ Organisational commitment to training is important to the reasons for the use of vocational qualifications. Organisations with a low commitment to training are likely to use vocational qualifications as a substitute for their own internal training. Organisations with a high commitment to training are more likely to use vocational qualifications to meet regulatory requirements or for competitive reasons.
- ✧ Workforce skills levels are important to making decisions about training. Organisations with high levels of workforce skill are likely to use vocational qualifications to meet standards or to enhance competitiveness, while organisations with low skills levels are likely to require vocational qualifications to gain skills not developed through their own internal training.

Employing apprentices and trainees

Those employers who make use of apprenticeships and traineeships for their employees do so for the following reasons.

- ✧ Apprenticeships and traineeships are normally used for specific, business-related reasons, particularly filling a specific skills need or a specific job vacancy in the organisation. Employers who employ apprentices and trainees for these reasons are likely to do so because they are experiencing difficulties in recruitment. These employers are also likely to have a highly skilled workforce and use internal training to raise the overall skills levels of the organisation.
- ✧ Employers who use apprenticeships and traineeships often do so to improve the overall level of skills in the workforce. However, these employers are likely not to be experiencing recruitment difficulties and they are also unlikely to use internal training to raise the skills levels of their workers.
- ✧ A number of the organisations which employ apprentices and trainees do so for altruistic reasons—to help young people or to give something back to the industry—although this practice is more likely to be related to factors at the organisational level such as managerial attitudes rather than industry-wide factors.
- ✧ Few of the employers who make use of this type of training hire apprentices and trainees for financial reasons and, if they do, it is often in combination with a wide variety of other reasons. The importance of financial considerations such as the availability of government subsidies to support the employment of apprentices and trainees has been significantly overstated in recent years.

Nationally recognised training

Those employers who make use of nationally recognised training for their employees do so for the following reasons.

- ✧ Meeting external regulations such as legislative or licensing requirements, or fulfilling the provisions of industrial agreements, awards or enterprise agreements is the dominant reason for employers using nationally recognised training.
- ✧ The provision of specific job- or business-related skills for their organisations is the second most important reason cited by employers.
- ✧ Many employers who use nationally recognised training do so to enhance their competitiveness by improving quality or by responding to the demands of new technology. This is usually associated with large organisations with a specialised skilled workforce. Here nationally recognised training is viewed as a means of achieving specific competitive business goals rather than raising the general level of workforce skills.
- ✧ Many organisations with a high level of workforce skills and experiencing difficulties in recruitment use this form of training to improve their overall management of human resources. This involves an ‘exchange’, whereby employers provide workers with nationally recognised qualifications in return for greater loyalty to the organisation, thereby improving retention.

Unaccredited training

Those employers who make use of unaccredited training for their employees do so for the following reasons.

- ✧ The major reason that employers give for using unaccredited training is to improve the overall skills levels of their workforces.
- ✧ Enhancing their competitive position in business, particularly to enable organisations to respond to the demands of new technology, is another reason given by a large number of employers who use unaccredited training.
- ✧ In contrast to the other forms of training, in many of those organisations that make use of unaccredited training for their employees, especially larger ones, this type of training shows a high level of integration with other human resource practices. Unaccredited training is being used by a significant number of employers to develop a more strategic approach to human resource management.
- ✧ The use of unaccredited training for internal organisational development reasons, including skills enhancement and developing a responsive workforce, is widespread, encompassing over 63% of all employers who used this type of training, and is found in almost all industry sectors.
- ✧ Organisations with a low level of workforce skills and which do not attach a high level of importance to training (that is, training does not appear in the strategic plan of the organisation) will use unaccredited training to improve the overall level of skills in their workforce. Conversely, organisations with a high level of skill and which attach a high level of importance to training will use unaccredited training to develop a more strategic approach to the use of human resources.

Conclusions

This study has shown that the process of making decisions about training in organisations is complex and is influenced by a wide variety of factors. Policy-makers in the VET area should be aware therefore that one-dimensional approaches, such as training levies, to increase the level of employer training are unlikely to be successful. A more sophisticated and nuanced approach to encouraging employers to invest in the training and development of their workers is necessary.

The need for skills—including specific skills for the business and raising the overall level of workforce—is the major factor driving those Australian organisations that adopted these forms of training for their employees. Employers need to take a more strategic approach to skills in enhancing their competitiveness and, as a consequence, place training in a more central position in their strategic planning.

The research has also identified a group of strategic and skill factors that exert a powerful influence on decisions about training in those organisations that used the four types of training covered by the Survey of Employer Use and Views of the VET system. These are: the overall importance of training to the organisation, the level of workforce skills in the organisation, and the difficulties that the organisation faces in recruiting good staff. Separately and in combination, these are critical factors which employers need to consider in their decisions to invest in training.

The study also provides evidence that training is becoming more integrated with other human resource objectives in some Australian organisations. In light of this and the use of training by employers to meet skill needs, registered training organisations need to take a more business-oriented approach to their relations with employers. Rather than simply selling ‘off the shelf’ training ‘products’ to businesses, these providers need to take a more consultative approach, whereby they address the overall business and competitive needs of the organisation and demonstrate to employers how training can help to position them strategically for a more competitive future.

Background and method

Introduction

Despite the ongoing research into training supported by employers in Australia and overseas (Cully 2006) and the availability of statistical evidence on training investments by Australian employers (ABS 2003; NCVER 2006), the operation of training activities in organisations remains something of a 'black box' for research and policy-makers. This is particularly the case when seeking to understand the reasons why employers provide training and their choices about the type of training they provide.

Research carried out in the mid-1990s identified the mechanism of employer-supported training at the organisational level (Smith & Hayton 1999). The findings from the research centred on a model of employer training which explained the interplay of organisational factors in influencing the decisions taken by organisations in training their employees. The model is illustrated in figure A1, appendix 2. Three key points were highlighted in the research. First, workplace change emerged as a key driver for employer training in both the survey and the case studies. Second, organisations reported that training needs were increasingly devolved to the individual level and that they were progressively abandoning the traditional approach to training programs, whereby large groups of employees receive the same training, regardless of individual need. Finally, not only were training needs individualised, but the implementation of training increasingly depended on the willingness of the individual to highlight their training requirement to managers, who would then organise for appropriate training to be arranged.

Further research investigated the relationship between employer training and organisational change in Australian firms (E Smith et al. 2005) and found a strong link between training and business strategy. Where organisations connected their training and their business strategies, the result was a substantial increase in all forms of training and greater embedding of training into the management of the enterprise through the creation of training departments, the establishment of formal training planning processes and the use of workplace trainers. Training had become more decentralised, with responsibility for training and the development of employees' skills increasingly viewed as the realm of the line manager and therefore appearing as a performance target for managers in larger organisations.

Research on the impact of nationally recognised training has shown that the introduction of training packages has led to a massive increase in the uptake of nationally recognised training amongst Australian enterprises (E Smith et al. 2005). For enterprises offering nationally recognised training, the training effort is now more evenly distributed across the workforce, with larger numbers of operational employees receiving training. This development is thus changing the chronic skewing of training distribution in organisations whereby professional and managerial employees were largely the beneficiaries of training. Research into the use of training package¹ competency standards in recruitment, selection, and job classification and performance management systems also demonstrates an increasing link between training and other human resource activities in organisations, especially in enterprise registered training organisations. There is evidence that enterprises partnering with external training providers to deliver nationally recognised

¹ Refer to the glossary in appendix 1 for the definition of this and other terms.

training make notable changes to those human resource functions associated with employee development. The emergence of the learning and development function, with its internal emphasis on the integration of training with career and organisation development and business strategy on the one hand, and with the external VET system on the other, appears to be a new form of human resource development, perhaps unique to Australian organisations.

Recent work by the Australian Industry Group (Allen Consulting Group 2006) and the Business Council of Australia (2006) has also underlined the increasingly strategic nature of training in modern Australian organisations. These reports highlight how the current skills shortages are driving training activities in organisations. Organisations are beginning to realise that their future access to the skills identified as necessary for future growth cannot be guaranteed by the outputs of the national vocational education and training (VET) system and that they need to increase their own training efforts in house to ensure the supply of skills. In other words, skills have become a major driver for employer training. International research has highlighted the prominence of training in the development of new approaches to human resource management and high-performance work systems (Butler et al. 2004). Here training is important because it enables employers to implement new systems of work organisation that will radically improve business performance. Cappelli (2004) has argued that training plays a key role in building the close human relationships required for high-performance work systems and often referred to as 'social capital'.

While there are a variety of reasons for employers to provide training to their employees, little is known about how these reasons influence choices about the type of training to provide. This project analyses the 2005 National Centre for Vocational Education Research (NCVER) Survey of Employer Use and Views of the VET system (SEUV) to uncover the reasons why the employers surveyed provided training and how different organisational characteristics predisposed employers towards particular training choices.

Method

The Survey of Employer Use and Views of the VET system is undertaken on a biennial basis by NCVER to determine the level of employer satisfaction with the national VET system. In recent years the survey has been considerably modified to include a range of questions on employer use of the VET system and of different forms of accredited and non-accredited training. It also measures employer satisfaction. The 2005 survey included questions on the following general topic areas:

- ✧ organisational characteristics
- ✧ the relationship between training and the business strategy of the organisation
- ✧ the extent to which employer skills needs were being met
- ✧ use of and satisfaction with formal vocational qualifications
- ✧ use of and satisfaction with apprenticeships and traineeships
- ✧ use of and satisfaction with nationally recognised training
- ✧ use of and satisfaction with unaccredited training.

Using computer-assisted telephone interviewing, managers best suited to answer questions on training in the organisation were interviewed. A sample of 25 604 employers was drawn by the Australian Bureau of Statistics (ABS) from the Australian Business Register and yielded 6418 in-scope employers. A total of 4601 interviews were carried out. The final response rate achieved was 71.7%.

The purpose of this project was to use the 2005 survey data to better understand the dynamics of training in organisations and the decisions about training made by employers. The specific research questions were:

- 1 How widespread is the use of nationally recognised training and how is it being used to meet the emerging skill needs of organisations?
- 2 What do employers think they get from different forms of training? What determines these perceptions?
- 3 How are employer training decisions affected by factors such as size, industry and employment/occupational structure and business strategy?
- 4 What factors make organisations decide to use nationally recognised as opposed to non-accredited training and vice versa?

To answer these questions, a two-stage analysis process was adopted. The first stage involved a cluster analysis of the reasons given by employers for the use of the various forms of training; that is, having vocational qualifications as a job requirement, employing apprentices and/or trainees, using nationally recognised training, and using unaccredited training. Although the survey accepted multiple reasons from employers for providing training, employers were not asked to rank these reasons. The cluster analysis enabled us to distinguish the more important from the less important reasons for training provision.

The second stage involved a statistical modelling process, in which the reasons employers had given for providing the different forms of training were modelled against a range of organisational characteristics or variables which are commonly cited in the literature as factors influencing decisions about the provision of training in organisations. These factors included:

- ✧ *Industry type*: these are derived from the Australian and New Zealand Standard Industrial Classification (ANZSIC).
- ✧ *Organisational status*: this refers to whether the employers' organisations were private 'for profit', private 'not for profit', or government business enterprises.
- ✧ *Employer size*: this refers to the number of employees and is divided into large (100+ employees), medium (10–99 employees) and small (1–9 employees).
- ✧ *Permanence of employees*: this refers to the employment conditions of the workforce. Low permanence means that fewer than 25% of employees are employed on permanent arrangements; medium permanence that 25–99% of employees are permanent; and high permanence that all employees are permanent.
- ✧ *Occupational type*: this refers to whether the workforce of the organisation is primarily blue collar (approximately 20% of organisations were in this category), white collar (approximately 10% of organisations were in this category), or knowledge workers (approximately 27% of organisations were in this category).²
- ✧ *Strategic and skill variables*: this set of characteristics includes a number of strategic and training-related variables:
 - ◆ whether the organisation is a registered training organisation
 - ◆ whether the organisation has a business plan
 - ◆ whether staff training is part of the business plan
 - ◆ the importance of training to the organisation
 - ◆ the current level of skills required by the organisation
 - ◆ whether the organisation is experiencing difficulties in recruiting staff.

² Blue collar: more than 50% of the workforce are categorised as machinery operators and drivers or labourers; white collar: more than 50% of the workforce are categorised as clerical and administrative staff; knowledge workers: more than 50% of the workforce are categorised as professionals, technicians and tradespersons.

Each of these characteristics was modelled against the clusters of reasons employers gave for requiring vocational qualifications for jobs in their organisations. In this report we discuss a simplified version of the results of this modelling. The modelling produced both negative and positive associations. Only the strongest negative and positive statistical associations are discussed here.

In the following chapters we present the key results from both the cluster analysis and the modelling. In the cluster analysis we have grouped the reasons that employers gave in the 2005 survey for choosing different forms of training. This means that each employer who responded to the questions in the survey appears in a single cluster. In some cases employers gave only one reason for choosing a particular form of training, but in many instances they gave multiple reasons. In the clustering process we have simplified the reasons employers gave for choosing different forms of training by grouping them into between four and six 'combined reasons'.

In each case we discuss what the cluster analysis and the modelling say about the reasons employers gave for choosing to use these forms of training. A fifth modelling process was also carried out which specified the reasons that employers gave for using nationally recognised training in preference to unaccredited training.

A more detailed account of the statistical processes and detailed result tables can be found in the support document that accompanies this report.

The use of vocational qualifications

In the 2005 Survey of Employer Use and Views of the VET system employers could provide multiple reasons why their organisation had specific jobs that required formal vocational qualifications. Responses were categorised according to one of seven reasons. These seven reasons have been conflated into four overall categories of: skills, regulations, standards and competition. Further detail on these categories is given in the support document.

Since many employers cited more than one reason (some cited up to five reasons) for their use of vocational qualifications, we grouped all the employers who responded to this question (1760) into five clusters as follows:

Cluster 1: Skills—to provide skills only for the job in question, not a more general skills upgrading

Cluster 2: Regulations—includes both external regulatory reasons, such as legislative or licensing requirements, and internal regulations to meet the provisions of industrial awards or enterprise agreements

Cluster 3: Standards and regulations—to meet standards cited by all employers who required this kind of training, with around a quarter also citing regulations

Cluster 4: Skills, standards and regulations—to ensure that the organisation complies with professional or industry standards, with about a quarter of employers also citing regulation reasons

Cluster 5: Competition, skills and other reasons—the broadest of the clusters and includes using vocational qualifications to ensure that quality is improved, that the organisation effectively deals with new technology or that the organisation remains competitive. Employers in this cluster also cited many other groups of reasons as well.

Of the 1760 organisations that responded to this question in the 2005 survey, each appears in one cluster only.

Table 1 shows that skills-related reasons are the most important reasons given by employers who required vocational qualifications for jobs in their organisations. This reason was given by 885 employers in total, which is just over 50% of employers who answered this question. Moreover, 26% (451) of all employers who used this kind of training cited skills as the only reason for using vocational qualifications. After skills, the most important reason was compliance with professional or industry standards. This reason was cited by 41% (724) of all employers who used this kind of training answering this question. However, 102 of these employers cited standards with regulations, so only 298 employers cited standards alone as the reason for requiring vocational qualifications for jobs in their organisations. Regulation, that is, complying with external regulatory requirements or the internal requirements of awards and enterprise agreements was the next most important reason for requiring vocational qualifications and was cited by almost 39% (684) of employers who used this kind of training. Regulatory reasons alone were cited by 23% (402) of all employers who used this kind of training. Finally, competitive reasons (improvement in quality, new technology and remaining competitive) were cited by just over 11% (198) of employers. This is a relatively low figure and most of these employers cited competitive reasons with others, not ranking competition highly as a reason for requiring vocational qualifications.

Table 1 Reasons given by employers for having vocational qualifications as a job requirement: Cluster analysis

Reasons	Cluster					Total
	1	2	3	4	5	
Skills	451 (100)			309 (100)	125 (63)	885 (50)
Standards			400 (100)	236 (76)	88 (44)	724 (41)
Regulations		402 (100)	102 (26)	141 (46)	39 (20)	684 (39)
Competition					198 (100)	198 (11)
Number of employers	451	402	400	309	198	1760

Notes: Bolded figures are the main reasons cited by employers in each cluster. Numbers in parentheses represent the percentage of employers in the cluster who cite the stated reason. Numbers and percentages in the final right-hand column under 'Total' refers to the total numbers of employers giving the reasons on the left. Since many employers gave more than one reason, the totals sum to more than 100% of the total number of responding employers.

The cluster analysis shows that employers who required vocational qualifications tend to do so for two major reasons: to provide skills for certain jobs in their organisations; and for compliance with external regulation or with industrial agreements and with professional or industry standards.

Results from the modelling

The statistical modelling process took the clusters of employers who required vocational qualifications developed in the cluster analysis phase and examined whether there were statistical associations between the clusters and the six sets of organisational characteristics. Table A1 in appendix 2 summarises the results of the modelling on the reasons that employers who used vocational qualifications gave for requiring this training for jobs in their organisations.

The first and most important aspect the modelling reveals is the sheer complexity of the training decision-making process in organisations. The reasons that employers who used this type of training give for requiring vocational qualifications for jobs in their organisations are affected by a very wide variety of factors. Although we quote only the strongest statistical associations in table A1, almost all of the individual organisational characteristics appeared at some point in the analysis. Thus, the reasons for the surveyed organisations that required vocational qualifications are related strongly to the industry in which the organisation is located, the size of the organisation, the nature of the employment of workers in the organisation, the occupational structure of the workforce, the role and importance of training in the organisation and the experience of the organisation in recruitment. This complexity is an important theme running through our analysis and constitutes a very strong warning to policy-makers in the area of employer training to beware of simple solutions to addressing the issue of increasing employer investments in training.

A second element revealed by the modelling is the importance the organisations attach to training. In organisations which used vocational qualifications and where training is regarded as important to the business, employers are more likely to require these qualifications because they wish to comply with external or internal regulations (cluster 2) or for competitive and other reasons (cluster 5). Skills are less important to this group, presumably because these organisations are confident that their commitment to training will supply the level of skills required in the future. Where training is not important in the organisation, employers who use this type of training are more likely to use vocational qualifications to meet the skills needs of jobs (cluster 1) or to maintain professional and industry standards (cluster 3). This suggests that employers without a high commitment to training will require vocational qualifications from recruits in order to meet their skills needs, which they do not meet through training, and to meet the standards required of them.

The current skills levels of the workforce also appear to be important in the training decisions of the employers who used this kind of training. Those organisations reporting a low level of current skills are more likely to require vocational qualifications to meet their skills needs (clusters 1 and 4). Organisations with high levels of workforce skills are more likely to require vocational qualifications in order to maintain professional and industry standards for reasons of competition. In this case employers who make use of vocational qualifications do so, not to supply skills to the organisation, which already enjoys a high skills levels amongst its workers, but to demonstrate that it meets standards or to enhance its competitive status through using new technologies better or enhancing quality.

The employment of apprentices and trainees

In the 2005 Survey of Employer Use and Views of the VET system employers were asked to indicate the main reasons for employing apprentices and trainees in the preceding 12 months. Employers were able to cite more than one reason. For the purposes of this analysis the reasons supplied in relation to the employment of apprentices and trainees have been conflated into six categories: specific skills, skilling staff, specific role, ethical, cost, and practice and culture. Further detail on these categories is given in the support document.

The employers who used apprenticeships and traineeships and who responded to this question in the survey (1459) were divided into five mutually exclusive clusters, according to the main reasons they had given for employing apprentices and trainees. The clusters were as follows:

Cluster 1: Specific skills—the need for specific skills or to meet employers’ specific skills requirements

Cluster 2: Skilling staff—all the employers who used this kind of training cited the need to generally enhance the skills of staff or allow them to gain a nationally recognised qualification, with a small subset (81) also citing the need for specific skills.

Cluster 3: Specific role and skills—the need to fill a specific role or to fulfil regulatory requirements, with many of the employers who used this kind of training also citing skills needs.

Cluster 4: Ethical—to give back to the industry, give young people a head start or to help Indigenous people. These employers usually cited a number of the reasons, including the need to acquire skills, specific or general, and to fill a specific role in the organisation.

Cluster 5: Cost, practice and culture and other reasons—a wide variety of reasons, with no one reason given by all employers who used this kind of training, as in the other clusters. The most common reasons given in this cluster were costs (58% of employers) or practice and culture (52% of employers).

Table 2 Reasons for employing apprentices/trainees: Cluster analysis

Reasons	Cluster					Total
	1	2	3	4	5	
Specific skills	290 (100)	81 (35)	103 (37)	67 (27)	127 (31)	668 (46)
Skilling staff		232 (100)	48 (17)	55 (22)	115 (28)	450 (31)
Specific role			280 (100)	58 (24)	107 (26)	445 (31)
Ethical				246 (100)	94 (23)	340 (23)
Cost					239 (58)	239 (16)
Practice and culture					212 (52)	212 (15)
Number of employers	290	232	280	246	411	1459

Notes: Bolded figures are the main reasons cited by employers in each cluster. Numbers in parentheses represent the percentage of employers in the cluster who cite the stated reason. Numbers and percentages in the final right-hand column under ‘Total’ refer to the total numbers of employers giving the reasons on the left. Since many employers gave more than one reason, the totals sum to more than 100% of the total number of responding employers.

Table 2 shows that the major reason for this group of employers—those who used apprenticeships and traineeships—adopting this type of training is to meet a specific skill need in the organisation, with nearly half (46%) of all employers surveyed citing this reason. Moreover, 20% of the employers who used this training (290) cited the requirement to fill a specific skill need as their only reason for hiring apprentices and trainees. The need to generally improve the level of skills in the workforce and/or provide staff with a nationally recognised qualification was the next most common reason, with just over 30% of all employers using this training citing this. Taken with cluster 1, these results show that the vast majority of employers who used apprenticeships and traineeships cited skills-related reasons—either specific skills or a general improvement in skills levels—as reasons for employing apprentices and trainees. Altogether, over 70% of employers (1037) cited skills-related reasons for employing apprentices and trainees. Moreover, 441 employers or about 30% of the sample cited these reasons only. Thus skills-related reasons predominate in the decisions of the employers who employed apprentices and trainees, more so than their requirements for vocational qualifications generally.

The most interesting of the other reasons given by employers who hired apprentices and trainees related to altruistic or ethical reasons. Almost a quarter of the employers surveyed (340) cited ethical reasons for hiring apprentices and trainees (for example, giving young people a head start, giving something back to the industry and/or helping Indigenous people find employment). These reasons were almost always cited in conjunction with a wide variety of other reasons, most commonly, skills- or employment-related reasons. However, the employment of apprentices and trainees clearly has a strong normative dimension in the minds of many employers. Given the debate over many years on the impact of government employment and training subsidies on the decisions of employers to hire apprentices and trainees, it is interesting to note that cost reasons were rated relatively lowly by employers in the 2005 survey, with only 16% (239) of employers citing the need for cheap labour or claiming that apprenticeships and traineeships are cost-effective. This indicates that the widespread belief that employers only employ apprentices and trainees because of financial incentives is largely a myth and that the vast majority of employers focus on skills or employment-related reasons in their decision to employ apprentices and trainees.

The cluster analysis has shown that there are two major sets of reasons why employers who hire apprentices and trainees do so: the need to acquire skills specific to certain jobs or to train workers in skills specific to the business, and the need to generally enhance the skills base of the workforce.

Results from the modelling

The modelling process identified strong statistical associations between the clusters of employers who use apprenticeships and traineeships and the various organisational characteristics described above. The results of the statistical modelling for the decision to employ apprentices and trainees are presented in table A2.

One of the most interesting contrasts to emerge from the modelling is found between the factors that affect the decision to employ apprentices and trainees for specific skills reasons or for generally skilling staff. The employment of apprentices and trainees to meet specific skills has a strong positive association with two industry sectors—property and business services and culture and recreational services. With respect to type of occupation, the employment of apprentices and trainees for specific skills has a strong negative association with organisations with a predominantly white-collar workforce. This represents only a small proportion of organisations that use this type of training captured in the survey. Nevertheless, the decision to hire apprentices and trainees for specific skills is strongly associated with a high level of current workforce skills and a high level of commitment to training, as evidenced by its presence in the business plan of organisations. This suggests that organisations that hire apprentices and trainees to acquire specific skills are confident that their general level of workforce skills are adequate and that the workforce is underpinned by internal training activities, which makes it unnecessary to hire staff to boost the overall level of skills.

This decision is also more common where organisations are experiencing difficulties recruiting staff. In this case organisations that recruit apprentices and trainees may do so to meet specific skills needs which cannot be met through the hiring of skilled workers. This line of reasoning also applies to organisations that hire apprentices and trainees to fill specific job vacancies—very closely related to hiring for specific skills. This is associated particularly strongly with the communications industry and with the construction industry a notable exception. In this survey it is also strongly correlated to organisations with a predominantly blue-collar, white-collar or knowledge worker workforce. These categories cover about 57% of the organisations that responded to the 2005 survey, suggesting that the hiring of apprentices and trainees to fill a specific job vacancy may be quite widespread. Not surprisingly, this decision is also common in organisations experiencing difficulties in recruitment. In this case, skill shortages may be leading employers to use the apprenticeship and traineeship system to fill specific job or skills gaps in the organisation.

Employing apprentices and trainees to improve the overall level of skills in the workforce occurs under circumstances very different from the decision to hire to fill specific job or skills gaps. For those who used this type of training, this decision is more common amongst employers in the agriculture, forestry and fishing and mining sectors (noted for their use of traditional four-year apprenticeships) and the finance and insurance industry, which has seen a recent significant expansion of traineeships. However, here it is the organisational drivers that provide an interesting case. Hiring apprentices and trainees for the purposes of generally skilling staff does not occur in organisations with a predominantly blue-collar or knowledge worker workforce. These groups account for 47% of the employers in the 2005 survey, suggesting, for those who used apprenticeships and traineeships, that making decisions about adopting this form of training for general staff skilling is not as widespread as the decision to use apprentices and trainees to fill specific jobs or skill gaps. Moreover, organisations that used apprenticeships and traineeships for training employees and where training is not included in the business plan or that have a low level of workforce skills, are more likely to hire apprentices and trainees to improve the overall level of workforce skills (that is, as a substitute for strong internal training program).

Although some 23% of employers who use this kind of training for their employees reported that they employ apprentices and trainees for altruistic reasons—to give back to the industry or to give young people a head start—the modelling suggests that this is not consistent across sectors. Employers in agriculture, forestry and fishing, finance and insurance, property and business services, and cultural and recreational services who used this training do not offer this reason for hiring apprentices and trainees. This suggests decisions may be more dependent upon individual organisational characteristics such as managerial attitudes rather than sectoral characteristics. Enterprise registered training organisations are also unlikely to hire apprentices and trainees for altruistic reasons. Finally, for those employers who used this type of training for employees, their employment for cost, practice and culture reasons is associated with organisations experiencing few difficulties with recruitment.

Using nationally recognised training

In the 2005 Survey of Employer Use and Views of the VET system employers were asked to indicate the reasons why their organisation arranges for employees to undertake nationally recognised training. Employers could cite more than one reason. Their responses were categorised into eight main reasons as well as 'other' reasons. For the purposes of this analysis we have combined all the reasons, resulting in five categories of reasons: regulations, skills, standards, competition and human resources.

For the purposes of analysis employers who used nationally recognised training were divided into five clusters, according to the main reasons they gave for arranging for employees to undertake this type of training, as follows:

- Cluster 1: Standards and regulations:* all employers who used this kind of training cited maintaining professional or industry standards for using nationally recognised training; 25% also cited external regulations or the provision of awards and enterprise agreements (internal regulation).
- Cluster 2: Competition and standards:* all employers who used this type of training cited competitive reasons related to improving quality, responding to new technology, helping the business to grow and remaining competitive. A third also cited the need to maintain standards; also in the cluster is a very small number who cited costs or subsidy reasons for using nationally recognised training.
- Cluster 3: Skills and competition:* all employers who used nationally recognised training cited the need to provide skills required for the job (that is, specific skills), with about a quarter citing competitive reasons and a smaller number citing the need to maintain standards.
- Cluster 4: Human resources, skills and competition:* all employers who used this kind of training cited human resource reasons, but usually in combination with other reasons, primarily those related to skills, standards and competitive reasons.
- Cluster 5: Regulations:* this cluster contains the most variety of employer responses, but all employers who used this kind of training in this cluster cited external or internal regulatory reasons. Other reasons were only cited by a relatively small proportion of employers.

The cluster analysis is reproduced in table 3. The main reasons given by employers for using nationally recognised training are bolded under each cluster.

Table 3 Reasons for using nationally recognised training: Cluster analysis

Reasons	Cluster					Total
	1	2	3	4	5	
Regulations	52 (25)				546 (100)	598 (40)
Skills			334 (100)	89 (36)	72 (13)	495 (33)
Standards	208 (100)	47 (33)	40 (12)	58 (23)	46 (8)	399 (27)
Competition		142 (100)	79 (24)	86 (35)	47 (9)	354 (24)
Human resources				249 (100)	38 (7)	287 (19)
Number of employers	208	142	334	249	546	1479

Notes: Bolded figures are the main reasons cited by employers in each cluster. Numbers in parentheses represent the percentage of employers in the cluster who cite the stated reason. Numbers and percentages in the final right-hand column under 'Total' refer to the total numbers of employers giving the reasons on the left. Since many employers gave more than one reason, the totals sum to more than 100% of the total number of responding employers.

As table 3 demonstrates, the main reason given by employers who used nationally recognised training is the need to meet legislative, regulatory or licensing requirements (external regulation) or the provisions of awards and enterprise agreements (internal regulation): 40% who used this form of training cited regulation as the reason. This is not surprising, as external regulations often specify that employees possess a formal qualification. However, it is interesting to note that awards and enterprise agreements also appear to contain provisions that require employers to arrange for employees to receive a qualification through nationally recognised training.

The second most important reason given by employers who used nationally recognised training for their employees was to provide the skills required for the job: one-third of employers cited this reason. This reason corresponds to the specific skills reasons given for the use of vocational qualifications and apprenticeships and traineeships in other parts of the survey. There were only a few employers who used nationally recognised training who gave a more general, non-specific skills reason for its adoption. These more general upskilling reasons were combined in our human resources set of reasons. Thus, in terms of skills, employers in this survey who used nationally recognised training did so to generate specific skills for particular jobs rather than as means of generally upskilling the workforce. However, human resource-related reasons for training are much more significant, with nationally recognised training used more for these reasons than any of the other three forms of training examined in the 2005 survey. Nearly 20% (287) of employers who used nationally recognised training reported that they use it for a variety of human resource-related reasons. These included:

- ✧ to develop and maintain a flexible and responsive workforce
- ✧ to comply with employees' requests for training
- ✧ to improve staff morale or self-esteem
- ✧ to help employee retention
- ✧ to help in career development or to increase or update skills
- ✧ to formalise qualifications or skills.
- ✧ to allow employees to move around the industry or around Australia.

Thus, although the primary skills-based use for nationally recognised training is related to the generation of specific skills for the organisations that used it, many of these employers also appear to use nationally recognised training to improve their broader human resource management practices and outcomes. It is interesting to note that only the first of the reasons given above—to develop and maintain a flexible and responsive workforce—was given as a prompted answer in the

2005 survey. All the other reasons were given by employers unprompted under the ‘other reasons’ category. Although the numbers of employers who used nationally recognised training and who give human resource-related reasons for its adoption are relatively modest, it seems to be a strong motivating factor for these employers.

Finally, the use of nationally recognised training differs from vocational qualifications and apprenticeships and traineeships in that a significant number of employers cited competitive reasons for its use. Nearly one-quarter of employers responding to this question reported that they use nationally recognised training for competitive reasons. Those who used this form of training gave reasons for its use that relate to the overall improvement of the business, and include enhancing the quality of goods and services, responding to new technology and helping the business to grow or to add value to the business. However, this set of reasons was rarely given alone, but usually in combination with other reasons; hence, competition did not form a separate cluster of responses from those employers who used this kind of training but appears as important in three of the clusters (2, 3 and 4). This provides evidence that many employers who use nationally recognised training for their employees do not use it solely for standards or regulation-based reasons but for meeting the broader objectives of the business, one of the original intentions behind the development of training packages and their use by employers. Together with the human resource reasons also advanced by a notable portion of responding employers who used nationally recognised training, it is clear that this type of training has achieved a high degree of acceptance as an important means of improving the performance and management of their business.

The cluster analysis has shown that there are two major reasons why employers who used nationally recognised training have adopted this type of training. Namely, to meet the requirements of external or internal regulation and to provide specific skills for jobs in the organisation, and to meet much broader business-related reasons focused on enhancing the quality of human resources and the competitive position of the organisation.

Results from the modelling

The results of the statistical modelling process for nationally recognised training are summarised in table A3 in the appendix. The statistical modelling shows a high level of complexity in the interaction of factors associated with the decisions of employers who use nationally recognised training to adopt this form of training. Although regulatory reasons for the use of nationally recognised training are predominant in the cluster analysis, in the modelling these reasons appear to be confined to a relatively narrow set of employers.

Employers in the wholesale, retail, property and business service sectors who use nationally recognised training for their employees do not use it to meet external or internal regulations. This is a large group of employing organisations. Moreover, neither white-collar nor blue-collar organisations, which constitute some 30% of all employers who responded to the 2005 survey and who use nationally recognised training, use it for regulatory reasons; nor do enterprise registered training organisations (a small but important group in this context), because organisations become registered training organisations specifically to be able to provide nationally recognised training on their own terms. The use of nationally recognised training for regulatory purposes is only positively associated with the finance and insurance sector, with small organisations and with those not suffering from recruitment difficulties. The use of nationally recognised training to meet regulatory requirements is therefore not widespread but appears to be a quite specific decision confined to a relatively modest number of organisations.

The use of nationally recognised training to maintain professional or industry standards, on the other hand, appears to be more widespread. Although the analysis shows that the maintenance of standards is not a driver for using nationally recognised training, in a number of industry sectors that have adopted this form of training it is positively related to a wide variety of organisational factors, including organisations with a low or medium degree of permanence for employees and in

organisations with a predominantly blue-, white-collar or knowledge worker workforce. Thus the use of nationally recognised training to maintain standards is quite widespread outside the sectors negatively associated with this driver. Although it is associated with training being in the business plan, it appears that this may only constitute a low-level commitment to training in real terms, as it is also associated with training not being important to the organisation. Those organisations that use nationally recognised training, therefore, adopt it more as a means of ‘certification’—meeting externally generated standards—than for reasons for skilling the workforce.

Compared with vocational qualifications and employing apprenticeships and traineeships, the use of nationally recognised training is associated with two newer sets of reasons—competition and human resources. For those organisations that have adopted nationally recognised training for their employees, using this form of training for competitive reasons (improvement in quality, new technology etc.) does not have a strong positive association with any particular industry sector. It tends not to occur in small or medium-sized organisations, suggesting that it is a phenomenon more likely to be associated with larger organisations. Its use also tends to occur more frequently in organisations with a predominantly knowledge worker workforce. Thus, larger organisations with a more specialised workforce are more likely to use nationally recognised training to enhance their competitive position. However, it is not associated with a high level of commitment to training (that is, training is not included in the business plan) or with difficulties in recruiting the right staff. Thus, organisations that use nationally recognised training do not use it to raise the overall skills level of their workforces but to address specific issues in remaining competitive, such as enhancing quality and responding to new technology.

The use of nationally recognised training to improve human resource management tends to be limited to more specific organisations. While a number of industry sectors that use nationally recognised training do so for human resource purposes, it is the organisational drivers that are more interesting. These show that the use of nationally recognised training for human resource management purposes is characteristic of white-collar organisations and organisations where there is more emphasis on casual employment. More importantly, it seems to be characteristic of organisations with a high level of workforce skills and organisations experiencing difficulties in recruitment. In this situation organisations will be keen to retain the skills of their workers and it appears that training, especially nationally recognised training, plays a key role. Thus, training is important to these organisations and nationally recognised training is identified as being important in improving staff morale by providing qualifications that improve employees’ labour market credentials and therefore helps the organisation to retain their skills and services. This provides a good example of the increasing integration of training into broader human resource management strategies through interaction with the national training system.

Examination of the strategic and skills variables in the modelling highlights some interesting contrasts. Of those organisations that use nationally recognised training for their employees:

- ✧ Large organisations are more likely to use nationally recognised training to maintain standards for enhancing competitiveness. Small organisations are more likely to use this form of training to meet regulatory requirements.
- ✧ Registered training organisations are more likely to use nationally recognised training to enhance skills or to enhance competitiveness, whereas non-registered training organisations are more likely to use it to meet regulatory requirements.
- ✧ Organisations having recruitment difficulties are likely to use nationally recognised training to enhance skills and competitiveness and to improve retention through better human resource practices. Organisations not experiencing difficulties in recruitment are more likely to use nationally recognised training to meet regulatory requirements.
- ✧ Organisations where training is important and where skills levels are high are more likely to use nationally recognised training to improve human resource management, whereas organisations where training is not important are more likely to use nationally recognised training to meet standards and regulatory requirements.

Using unaccredited training

The final form of training investigated in the 2005 Survey of Employer Use and Views of the VET system was employers' use of unaccredited training. This is a broad category of training referring to formal and informal training or to training delivered on the job as well as off the job. This training does not lead to any formal qualification. Not surprisingly, unaccredited training accounts for the majority of training provided to employees by employers in this survey.

Employers using unaccredited training were asked to nominate the reasons why their organisation arranges for employees to undertake this kind of training. Employers could give more than one reason. The responses were categorised into eight main groups of reasons, along with an 'other' category. For the purposes of the cluster analysis, these reasons were conflated into five groups. These were: skills, competition, standards, responsive workforce and regulations. More detail on these categories can be found in the support document.

In order to carry out the statistical analysis of these reasons, employers who indicated they used unaccredited training for their employees were divided into five mutually exclusive clusters, based on the combination of reasons they gave for using the training. These five clusters are reproduced below.

- Cluster 1: Skills:* all employers who used unaccredited training cited skills as the only reason, and this includes the provision of specific job-related skills and updating the skills of the workforce generally.
- Cluster 2: Competition and skills:* all employers who used this kind of training cited competitive reasons, including the need to improve quality, respond to new technology and to remain competitive. Just under half also cited skill-related reasons.
- Cluster 3: Standards, competition and skills:* all employers who used this kind of training cited maintaining professional/industry standards, and over 40% cited both competition and skills as reasons.
- Cluster 4: Responsive workplace and skills:* all employers who used unaccredited training cited reasons related to developing a responsive workplace, and nearly half cited skills. Competition and standards were also cited but by less than one-third of employers.
- Cluster 5: Regulations:* all employers who used this kind of training cited regulations. All other reasons are cited, but only by a quarter or fewer of employers.

Table 4 Reasons for using unaccredited training: Cluster analysis

Reasons	Cluster					Total
	1	2	3	4	5	
Skills	654 (100)	246 (44)	256 (41)	223 (49)	86 (25)	1465 (56)
Competition		561 (100)	267 (43)	144 (31)	48 (14)	1020 (39)
Standards			623 (100)	103 (22)	80 (24)	806 (31)
Responsive workforce				459 (100)	17 (5)	476 (18)
Regulations					340 (100)	340 (13)
Number of employers	654	561	623	459	340	2637

Notes: Bolded figures are the main reasons cited by employers in each cluster. Numbers in parentheses represent the percentage of employers in the cluster who cite the stated reason. Numbers and percentages in the final right-hand column under 'Total' refer to the total numbers of employers giving the reasons on the left. Since many employers gave more than one reason, the totals sum to more than 100% of the total number of responding employers.

Clearly, the most important reasons given by employers for the use of unaccredited training are related to skills development, with 56% of employers who responded to this question giving these reasons; these refer to the need for both job-specific skills and raising the overall level of skills in the workforce. Some 654 (or 25%) employers gave skills-related reasons only for using unaccredited training.

Competition is also very important in the decisions made by employers about the use of unaccredited training, more so even than the decision to provide nationally recognised training. About 40% of employers (1020) who made use of unaccredited training gave competitive reasons for its use. Competitive reasons primarily refer to improving quality and responding to new technology; 561 employers gave this reason, with possibly one other set of reasons, this being skills. Of this group, 315 employers gave competition as the only reason for using unaccredited training, indicating that this is a major reason for use of this form of training.

In another parallel with the use of nationally recognised training, a significant number of employers who used unaccredited training (476 or 18% of all employers responding to this question) stated that they used this kind of training to develop a responsive and flexible workforce. This set of reasons also includes meeting specific training needs. Of these employers, nearly half also cited skills and about one-third cited competition. Thus the employers in cluster 4 form a significant group of employers who use unaccredited training to develop the skills of the workforce in order to meet competitive ends for the organisations. This might be viewed as a group of employers with a strategic human resource management focus, where unaccredited training is becoming integrated into organisations' strategic approach to the business and to human resource management.

Finally, standards and regulation play a less significant role in employers' decisions to use unaccredited training by comparison with the other three forms of training examined in the 2005 survey. Although a notable number of employers who used unaccredited training cited the maintenance of professional and/or industry standards, many of these (over 40%) also cited skills or competition-related reasons. The proportion of employers citing regulatory reasons for using unaccredited training is also smaller than for the other forms of training—only 13%. Of these employers, almost all also cited a variety of additional reasons.

Thus the cluster analysis shows that reasons given by employers who use unaccredited training for using this kind training differ quite markedly from the reasons given by those employers who use

other forms of training (although there is some similarity with the reasons given for using nationally recognised training). The key conclusions from this part of the analysis are:

- ✧ The provision of skills—both specific to particular jobs and in general to raise the skills levels of the workforce—is the main reason employers who use unaccredited training give for its use.
- ✧ A large number of employers who use unaccredited training use it to improve their competitiveness and, in particular, to enable them to respond to changes in technology.
- ✧ A smaller but noteworthy group of this group of employers appears to be using unaccredited training as a means of integrating their training with a more strategic approach to human resource management in order to enhance the competitive position of their organisations.

Results from the modelling

The results from the statistical modelling of organisational characteristics against the reasons that employers offer for using unaccredited training are summarised in table A4 in the appendix.

Again, the modelling of the reasons for using unaccredited training immediately highlights the complexity of the process associated with making decisions about training. In terms of industry type, two clusters stand out: those employers who indicated they use unaccredited training to meet professional or industry standards (cluster 3) and those who use it primarily to meet external and internal regulation (cluster 5). Employers using unaccredited training for the purposes of maintaining standards tend to be concentrated only in a limited number of industry sectors. Conversely, employers using unaccredited training in order to meet regulatory requirements are concentrated in a number of industry sectors (as shown in table A4 in the appendix). However, employers in the other three clusters; that is, using unaccredited training to enhance skills, improve competitiveness or develop a responsive workforce (which constitute the majority [63%] of the employers responding to this question) are not limited in their spread and can be found in most of the industry sectors. Thus using unaccredited training for purposes related to improving skills levels and performance, as well as in the area of human resources is not only common as the cluster analysis demonstrates, but is also non-industry specific.

The modelling of the strategic and skills variables provides a particularly interesting analysis of why employers' use unaccredited training. Firstly, the combination of the strategic importance of training and the skills levels of organisations appears to have a significant influence on the reasons why employers use unaccredited training. Organisations in which unaccredited training is used and where training has a low level of importance (that is, training does not appear in the strategic plan of the organisation) and where the level of current skills in the workforce is low tend to fall into cluster 1—using unaccredited training for the purposes of enhancing the overall level of skills in the workforce. In these organisations, unaccredited training, although it may not be built into the strategic plan (which in itself is not surprising, given the informal nature of much unaccredited training), is viewed as the major way in which overall skills levels can be improved. These organisations tend to have a white-collar workforce.

Conversely, organisations in which unaccredited training is used and where training enjoys a high level of strategic recognition (training is included in the business plan) and where the current skills levels of the workforce is high tend to use unaccredited training in order to develop a responsive workforce. As we showed in the cluster analysis, many of these employers also use unaccredited training to improve skills and enhance competitiveness; that is, to develop a more strategic approach to their use of human resources in order to improve the competitive position of the organisation. These employers also appear to suffer from a higher level of difficulty in recruitment, so that their more strategic approach to human resource management is driven by the necessity to improve the quality of the workforce through internal developmental measures, rather than relying on importing skilled workers from the external labour market. These organisations also tend to have a predominantly blue-collar workforce.

The current skills level of the workforce emerges from the modelling as an important factor in three of the clusters. Low current skills levels are associated with organisations that fall into clusters 1 (skills) and 5 (regulation). Thus organisations with a low level of skills in the workforce who use this kind of training tend to use it in order either to improve skills levels or to meet regulatory requirements. Organisations with high current skills levels tend to be found in cluster 4, where employers say they use unaccredited training in order to improve the responsiveness of their workforce.

The occupational structure of the workforce also emerged as an important factor in determining employer use of unaccredited training. Organisations with a predominantly white-collar workforce who use unaccredited training tend to do so to improve the overall skills levels of the workforce, but not to meet regulatory requirements. Organisations with a blue-collar workforce tend to use unaccredited training either to develop a responsive workforce (strategic human resource management) or to meet regulatory requirements. However, blue-collar organisations tend not to use unaccredited training to maintain professional or industry standards. Organisations with a predominantly knowledge worker workforce who use unaccredited training do so for the purposes of enhancing their competitiveness, but not for developing a responsive workforce.

Choosing nationally recognised training or unaccredited training

The final analysis in this study compared the reasons why employers in this survey chose nationally recognised training over unaccredited training. Again, the choice of nationally recognised training over unaccredited training was modelled against the usual set of organisational variables. The results of the modelling are presented in table A5 in the appendix.

In the context of the characteristics of those organisations that chose nationally recognised training over unaccredited training and those that did not, the analysis shows that there is no obvious pattern according to industry sector, with four industry sectors in each camp. However, there is a significant difference in the other variables. Organisations that chose unaccredited training over nationally recognised training tend to be small or medium-sized, precisely those organisations that the statistical data on employer training show are less likely to invest in formal training (ABS 2003). These are also organisations that tend to employ a large number of casual workers or, in addition, tend to employ a predominance of knowledge workers (such as professionals, technicians and tradespersons). The only strategic and skill variable associated with choosing unaccredited training over nationally recognised training is the existence of a business plan. Thus, the general picture of organisations that choose unaccredited training over nationally recognised training is of small or medium-sized organisations with a large number of casual workers.

By contrast, the organisations in this survey that chose nationally recognised training over unaccredited training are to be found widely scattered across the spectrum of size, employment conditions and occupational structure. These organisations are distinguished primarily on the basis of strategic and skill variables. That is, these organisations tend to view training as important and to give it strategic prominence in the business plan. They also tend to have a highly skilled workforce and experience difficulties in recruiting skilled workers. Registered training organisations routinely prefer nationally recognised training to unaccredited training.

Discussion

This analysis has highlighted the complexity of the processes associated with making decisions about training in organisations. Much of the literature in the area of employer training has tended to take a rather reductionist line when explaining the use and operation of training at the organisational level. Thus, training has been seen as: responding to a strategic skills gap (Hendry 1991) and to change initiatives (Smith & Hayton 1999); promoting the development of skills in the workforce (Allen Consulting Group 2006); part and parcel of implementing other human resource practices in bundles (Butler et al. 2004); and so on. From these perspectives, decisions about training are relatively unproblematic. Organisations identify a particular need or set of needs and consciously embark on training programs as part of a solution to those needs.

However, this analysis of the 2005 Survey of Employers' Use and Views of the VET system data has shown that the decisions made about the provision of training are part of a complex system of management practices in organisations. The reasons organisations give for undertaking specific training programs are many and varied, although strong patterns can be detected. The inherent complexity of decisions made about training can be demonstrated by the number of survey respondents who fall into clusters that encompass a multiplicity of reasons for providing the training—often between a third and a half of employers quote more than three reasons for providing the type of training in each cluster analysis set. Although the 2005 survey did not ask employers to rank the reasons for their training choices (hence the reason for our cluster analysis), it is likely that employers would have found it very difficult to undertake such an exercise.

The complexity of this area raises the issue of government policy relating to the provision of training. Given this complexity, it is unlikely that simple policies will work to significantly increase the overall level of training provided by organisations. Raising the demand for training has long been a vexed policy question in developed economies (Keating et al. 2000). In many instances attempts have been made to compel employers to undertake more training with little reference to why employers should provide training in the first place, or where training fits into overall strategic decision-making at the organisational level. In most cases these policy solutions have failed (Smith & Billett 2006), and this analysis has underlined the risk of such simple policy solutions. Improving employer demand for training is likely to require subtle, detailed and multi-layered policy approaches at all levels of government if it is to succeed in such a complex environment.

A related issue is the difficulty in interpreting the role of industry sector in influencing the reasons employers give for providing different forms of training. In all of the training types examined in the 2005 survey, the statistical modelling process showed that industry sector was often strongly associated, either positively or negatively, with the reasons that employers gave for providing the particular type of training. However, no simple picture emerges from an analysis of these relationships. For instance, in the decision to adopt nationally recognised training over unaccredited training, four industry sectors indicated they would choose nationally recognised training. However, these sectors are not those that typically support enterprise registered training organisations or are covered by regulations that may drive the adoption of nationally recognised training. It is likely that the reasons for the presence or absence of specific industry sectors are connected to cultural and other idiosyncratic factors that cannot be rendered visible by this form of analysis. Hence the industry sector analysis tends to confirm the innate complexity of training decision-making at the organisational level.

Having said this, our analysis has also confirmed that there are a number of important drivers in organisations for making decisions about training. As NCVER (2006) has shown, for each type of training analysed in the 2005 survey, in most instances up to four predominant reasons can be isolated. A critical issue to emerge from this analysis is the overarching dominance of skills and skills-related reasons for providing training. In summary, for the four types of training:

- ✧ Half of the employers who required vocational qualifications quoted skills as the driver for requiring these qualifications in jobs in their organisations.
- ✧ 46% of employers who made use of apprenticeships and traineeships quoted the need to gain skills specific to their business as the reason for the adoption of this training, and a further 31% quoted the need to improve staff skills generally.
- ✧ 33% of employers who used nationally recognised training quoted the need to provide staff with skills required for the job as a reason for adopting this kind of training.
- ✧ 56% of employers who used unaccredited training cited skills-related reasons for their use of this kind of training for their employees.

The development of skills is overwhelmingly the most important of the reasons that employers gave for providing three out of the four types of training. In the case of employers who provided nationally recognised training, skills are the second most important reason given, after the need to meet regulatory requirements. That skills development is the major reason for providing training accords with the recent analyses of employer views highlighting the increasing need for skills in most organisations as a future source of competitive advantage and the impact of full employment on the ability of organisations to attract and retain skilled workers (Allen Consulting Group 2006).

On the other hand, regulation, both external (meeting legislative and licensing requirements etc.) and internal (meeting the provisions of enterprise agreements and awards), plays a far less important role in training choices for organisations. The need to meet external or internal regulatory requirements was quoted by 39% of employers who required vocational qualifications (third most important reason for this type of training behind the need to develop skills and maintain professional/industry standards), by 40% of employers who used nationally recognised training (where it is the most important reason), and by only 13% of employers who used unaccredited training. For those employers who used apprenticeships and traineeships, regulatory reasons were not quoted as important in their decisions to adopt this type of training. This suggests that the need for compliance with internal and external regulation may compel organisations to provide training that results in formal qualifications but that it is not a universal driver of training. In these circumstances, it is even more unlikely that statutory requirements for organisations to increase their volume of training through training levies and similar arrangements would trigger across-the-board improvements in training provision but result in rather simple compliance behaviour from organisations (Smith & Billett 2006).

Of particular interest in this analysis is the importance of competition in driving the provision of different forms of training. Here competition included improvement in the quality of goods and services, responding to new technology and helping the business to grow, as well as generally remaining competitive. Competition was important to employers who used nationally recognised training and/or unaccredited training. Thus, organisations that used these two types of training appear to use both in-house and informal training (unaccredited training), as well as formal, accredited training to improve their competitiveness, especially quality in their organisation and in their use of new technologies. Previous analysis undertaken for this project separated out these two elements. For new technology it was clear that organisations tend to use unaccredited training. This may suggest that the other three types of training associated with the national training system—nationally recognised training, apprenticeships and traineeships and vocational qualifications—are not seen as viable responses to new technology. This finding on the importance of unaccredited training for new technology confirms earlier work that suggested that Australian firms tend not to use the national training system, specifically, nationally recognised training, to meet technology-driven training needs (E Smith et al. 2005). This study found that organisations in dynamic

technological sectors considered that training packages lagged too far behind developments in technology to be of any use in keeping employees current with new developments. The present analysis appears to confirm that trend. This finding may also have implications for innovation in Australian firms and the role that training can play in enhancing innovation. If Australian organisations are rejecting the national training system as a source of skills for new technology, there may be a significant gap between the training system and the national innovation system. In spite of all the rhetoric about the importance of training for innovation (Toner et al. 2004), it appears that Australian organisations are more likely to rely on their own in-house unaccredited training to supply the skills needed for effective innovation.

Organisations that use nationally recognised training or unaccredited training do so to improve quality. This means that, although organisations that use these two types of training will look to in-house training (albeit, in the case of nationally recognised training, supported by a registered training organisation), they clearly value qualifications-based training for quality-improvement purposes. This may also reflect earlier findings that nationally recognised training is often seen by employers as a means of benchmarking the skills of employees and ensuring a high quality of services and/or production (E Smith et al. 2005).

In terms of the organisational characteristics and factors that drive the adoption of training for particular reasons, three seem to recur frequently in the statistical models. These are:

- ✧ the overall importance of training to the organisation (measured by its appearance in the business plan or by the organisation stating its importance in the survey)
- ✧ the level of current skills in the workforce
- ✧ the degree of difficulty organisations are experiencing in recruitment.

These three factors, often in combination, appear repeatedly in the analysis of the reasons why employers provide different forms of training. Organisations attaching a high level of importance to training and which use nationally recognised training or unaccredited training are likely to focus on improving their human resource management and overall workforce skills development. On the other hand, organisations that value training but require vocational qualifications or the employment of apprentices and trainees use these forms of training for non-skill-related reasons, such as meeting regulatory requirements. Conversely, where organisations require vocational qualifications, or employ apprentices and trainees, or provide unaccredited training but do not attach much importance to training, they are likely to use these forms of training to meet their skills needs. In this case, organisations that use nationally recognised training tend to do so for non-skill needs, such as complying with regulatory requirements. This analysis suggests that organisations tend to perceive training as nationally recognised training and unaccredited training, whereas the requirement of vocational qualifications and the employment of apprentices and trainees are regarded, perhaps, as something other than training.

The importance of training was measured using two questions in the 2005 survey—whether or not staff training appeared in the business plan of the organisation and whether or not training was important in general to the organisation. Both of these factors showed a high number of strong statistical relationships in our analysis; that is, both seem to have a significant influence on employers' decisions to train. Of the two factors, the appearance of staff training in the business plan generated 12 strong statistical relationships, while the general importance of training generated eight. This suggests that the recognition of training as a strategic element in the organisation's operation is a substantial factor in employers' decisions about training. Whether the organisation views training as important will significantly influence decisions about training, but if it includes training as part of its strategic planning, then this will have an even greater influence, indicating the strategic importance of training to organisations.

The skills held by the organisation's workforce similarly influence decisions relating to training. Employers who have jobs that require vocational qualifications and whose workforces have a high level of skills will tend to require these qualifications for regulatory compliance purposes. On the

other hand, those who employ apprentices and trainees do so to fill quite specific skills gaps or jobs in their organisations. However, organisations that use nationally recognised training or unaccredited training adopt these forms of training because they require high levels of skills, not so much for developing the skills in their people, skills they already possess, but for higher levels of development in the capabilities of the workforce, often through the use of better human resource management practices.

The difficulty that organisations experience in recruiting staff also influences employers' use of certain forms of training. Those who employ apprentices and trainees do so because they are experiencing a high level of difficulty in recruitment and will tend to turn to this type of training to gain the requisite skills, while those who use nationally recognised training do so to fill specific job vacancies and gain specific job skills. Users of nationally recognised training adopt this training for human resource management-related reasons, specifically to retain trained workers, while organisations that use unaccredited training do so to develop the overall capabilities of their workforce.

Organisations that are finding recruitment easier will tend to use training for purposes other than skill development as they can recruit the skills they need externally. Organisations that use nationally recognised training do so to meet regulatory requirements or to improve their competitiveness (in terms of quality and new technology), while users of unaccredited training adopt this training to assist with compliance of regulations. On the other hand, organisations that use apprentices and trainees do so to meet their general skills development needs.

Two other factors relating to the employment conditions of the workforce were derived for this study, but appear to have less impact on the decisions about training. The first of these 'derived' variables was the level of permanence of the workforce. This factor described the proportion of workers in the organisation who were employed in a permanent capacity, as opposed to being employed casually. The analysis found that the level of permanence of the workforce had little impact on organisations' decisions about training. This is an interesting result in the light of the recent debates about the impact of casualisation on the opportunities for workers to access training. While the evidence on the low incidence of training for casual workers is incontrovertible, this analysis shows that it plays little part in the thinking of employers when they are determining the types of training they will provide. Organisations with high numbers of non-permanent employees may well provide less training overall; however, they display very little difference—in terms of the types of training or reasons they report for choosing specific training—from organisations with higher levels of permanent staff.

The second variable is related to the occupational structure of the workforce. This was based on the extent to which the workforce was predominantly blue-collar, white-collar or knowledge workers. In our analysis blue-collar organisations tend to use training to meet regulatory requirements; that is, responding to external drivers for training. White-collar and knowledge worker organisations tend to use training to meet skills needs, an internally focused reason for providing training. Decisions about training also appear to be more complex in white-collar and knowledge worker organisations. This, together with the focus on skills development in these organisations, may reflect a more strategic approach to training. However, this is very tentative conclusion.

This study has also shed light on the relationship between training and broader approaches to human resource management in Australian organisations. In recent years new approaches to human resource management have been the subject of significant research and comment. In general, the human resource management literature shows that, in the more competitive and globalised world, organisations increasingly compete on the basis of the skills and abilities of their human resources. Other factors related to production, including technology and geography, are easier for competitors to imitate, but the skills of the workforce may lend the organisation a unique source of sustainable competitive advantage. Thus, human resource management practices are becoming more important to organisations as they seek to capitalise on the skills of their workers. However, the research also suggests that, for employers to get the best from their workforces, human resource practices must

be integrated and be complementary. This means that practices such as recruitment and selection, training, performance management and work organisation need to work with, not against, one another if the organisation is to reap maximum benefit from its investments in people (Boxall & Purcell 2003).

This study has shown that where nationally recognised training or unaccredited training is used, they are linked to human resource management. A substantial number of those employers who use nationally recognised training do so for a range of human resource management objectives, including improving staff morale and retaining skilled staff. Here training is clearly integrated with other human resource objectives for the organisation. Where employers use unaccredited training, it is also used to improve the responsiveness of the workforce—another major human resource management outcome area. Thus, it appears that, in a relatively large number of Australian organisations, training is seen as part and parcel of a more integrated approach to human resource management, not simply as a strategy that sits outside the other human resource practices of the organisation. This finding confirms the findings of earlier work on the use that employers make of nationally recognised training (Smith & Smith 2007) and is reinforced by the results of the 2005 survey (NCVER 2006), which showed that, in a small but increasing number of Australian employers, the adoption of nationally recognised training was leading to the restructuring of the human resource management function around training and development, whereby elements of training packages (such as competency standards) were being used to underpin other human resource practices such as recruitment, selection, succession planning and organisation development.

Conclusion

This analysis has shown that the reasons motivating employers to provide training are numerous—the need to generate specific or general skills, to meet regulatory requirements, to maintain standards, to improve quality or deal with new technology, to underpin broader approaches to human resource management and so on. Factors that affect what training employers provide, why and to whom are even more varied and complex. Policy responses to the issue of increasing employer investments in training need to take this complexity into account.

Clearly, organisations in different industry sectors approach their decisions about the provision of training in different ways. Policy therefore needs to be sensitive to industry differences, as highlighted in this analysis, and be tailored to the different needs and circumstances of industry sectors, focusing on the factors that seem to exercise the most influence on employers' decisions to train. The analysis has suggested that what we have termed the 'strategy and skill' factors are important here. These include the strategic importance attached to training in organisations, the level of skill in the workforce and the difficulties organisations are experiencing with recruitment. Policies that leverage these factors in the organisation are more likely to be successful in raising the quality and skills of the Australian workforce than simple 'carrots and sticks'.

For employers, it could be said that the converse applies. While policy-makers need to appreciate the complex dynamics associated with making decisions about training in organisations, employers live with this level of complexity day to day. For employers, the issue is the organisational-level factors with potentially the most impact on training decisions. There are a number of lessons that emerge from this study, the foremost being that employers need to focus on the long-term skill needs of their organisations. Meeting skill needs, whether specific to a job or the general skills level of the workforce, is the most important reason given by employers for nearly all forms of training examined in this study. Employers need to focus on the role that skills will play in their future business strategies and plan their training investments accordingly. This study has demonstrated the strategic importance of training and how this affects decisions about its provision. Including training as a crucial component of the strategic planning of the organisation will help employers to focus on the skill needs of the organisation—the appropriate levels and types.

That employers are increasingly looking to training as part of their response to a more competitive business environment has also been highlighted in the analysis and underlines the importance of making strategic decisions about training. This analysis has shown that an increasing number of organisations are using training—especially nationally recognised training—to support a more sophisticated approach to the management of human resources. This involves integrating training with other aspects of human resource management, including recruitment, selection, and performance management and organisation development.

This study suggests that, for registered training organisations and other training providers, a more nuanced approach to their relations with employers could pay significant dividends for them and for businesses. The complexity of the analysis by industry sector reveals that a uniform approach will not succeed, as the circumstances and histories of the various industry sectors exert a powerful influence on the forms of training employers provide and their reasons for providing training. The importance of the ‘strategy and skill’ factors suggests that training organisations need to consult with business on a broader front, rather than simply marketing training products ‘off the shelf’. A far more effective approach would be to promote the benefits of the strategy and skill factors and market training accordingly. Registered training organisations that take this broader strategic approach to their relations with organisations are more likely to succeed in forming long-lasting partnerships that will yield substantial value to both parties.

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Appendix 1

Glossary

Apprentice or trainee: a student who has signed a formal agreement with an employer, known as either a training agreement or contract of training. Includes government-supported structured work and training programs in which the employer is obliged to provide training, supervision and support, and the apprentice or trainee is obliged to undertake paid work as well as do the training.

Employer: for the purposes of this survey and publication a 'type of activity unit' operating within Australia with at least one employee.

Nationally recognised training: an accredited program of study that leads to vocational qualifications that meet the requirements agreed under the National Training Framework. The framework is a system of vocational education and training that applies nationally. It is made up of the Australian Quality Training Framework (AQTF) and nationally endorsed training packages. It can apply to a whole course (qualification) or components of a course (units of competency and modules).

Size of employer

- ✧ **Small employer:** an employer with between 1 and 9 employees
- ✧ **Medium employer:** an employer with between 10 and 99 employees
- ✧ **Large employer:** an employer with 100 or more employees

Unaccredited training: training that does not lead to a nationally recognised qualification. The training activity must have a specified content or predetermined plan designed to develop employment-related skills and competencies.

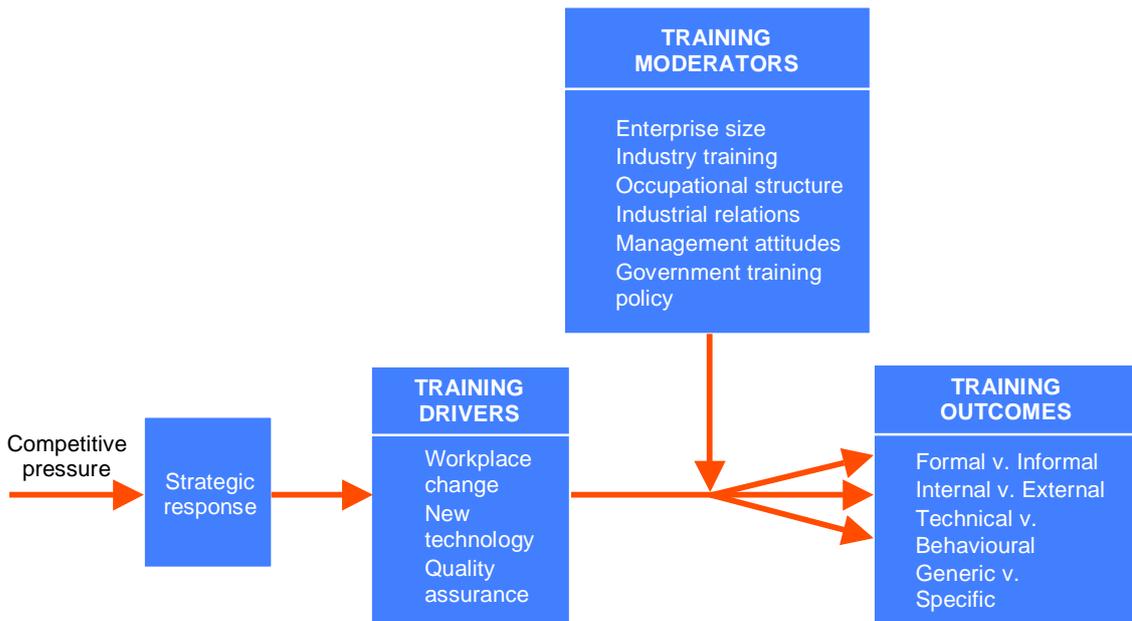
Vocational qualification: a qualification that is nationally recognised. These qualifications are delivered by registered training organisations such as TAFE institutes, private providers and vocational divisions of universities.

Training package: a set of units of competency which, when combined, lead to recognised qualifications for a specific occupation or industry. They are developed by industry with the aim of meeting the needs of an industry or group of industries. For more details of training packages go to <<http://www.ntis.gov.au>>

Sources: NCVER Students and Courses (2005); NCVER Survey of Employer Use and Views of the VET system (2005).

Appendix 2: Supporting figures and tables

Figure 1 A model of enterprise training



Source: Smith & Hayton (1999).

Results from statistical modelling

The statistical modelling used in this research modelled the different forms of training (vocational qualifications, apprentices and trainees, nationally recognised training and unaccredited training) against a range of organisational characteristics commonly believed to influence decisions about training in organisations. Tables A1 to A5 support the analysis provided in the report.

Table A1 Reasons for requiring vocational qualifications by industry type and other organisational variables

Reasons	Industry type	Organisational drivers
Skills	In wholesale Not in electricity, gas, and water, transport, culture and recreational services	Training is not important in this organisation Low current skills levels
Regulations	In electricity, gas, and water, finance and insurance, education, health and community services, culture and recreational services Not in manufacturing	Small or medium-sized organisation Not a white-collar or knowledge worker organisation Training is important in this organisation
Standards and regulations	Not in agriculture, forestry and fishing, manufacturing, construction, wholesale, health and community services	Medium employee permanency A white-collar organisation When training is not in business plan Training is not important in this organisation High current skills levels
Skills, standards and regulations	In agriculture, forestry and fishing, manufacturing, retail, communications. Not in education	White-collar or knowledge worker organisation Negative when training is not in business plan Training is important in this organisation Low current skills levels
Competition, skills and other reasons	Not in agriculture, forestry and fishing, wholesale, retail, accommodation, restaurants and cafes, finance and insurance, property and business services, education, health and community services	Not a small organisation Medium employee permanency Not a knowledge worker organisation Training is in the business plan Training is important in this organisation High current skills levels

Table A2 Reasons for employing apprentices and trainees by industry type and other organisational variables

Reasons	Industry type	Organisational drivers
Specific skills only	In property and business, culture and recreational services	Medium employee permanency Not in a white-collar organisation Training is in the business plan High current skills level High difficulty in recruitment
Skilling staff	In agriculture, forestry and fishing, mining, finance and insurance	Not if a blue or knowledge worker organisation Not if training is in business plan Low current skills levels
Filling a specific role or meeting regulations	In communications Not in construction	If white-, blue-collar or knowledge worker organisations High difficulty in recruitment
Ethical	Not in agriculture, forestry and fishing, finance and insurance, property and business services, culture and recreational services, transport	Not if private for profit Not if an RTO
Cost, practice and culture reasons	Not in manufacturing	If an RTO Negative when training is not in business plan Low recruitment difficulties

Table A3 Reasons for using nationally recognised training by industry and other organisational variables

Reasons	Industry type	Organisational drivers
Standards and regulations	Not in agriculture, forestry and fishing, manufacturing, electricity, gas and water, construction, accommodation, restaurants and cafes, transport, finance and insurance, education, property and business services, health and community services, culture and recreational services	In low or medium permanency of employees In blue-, white-collar and knowledge worker organisations Training is in the business plan Training is not important
Competition and standards	Not in finance and insurance	Not in small or medium-sized organisations In knowledge worker organisations Positive when training is not in business plan Low recruitment difficulties
Skills and competition	In wholesale, retail, property and business services, culture and recreational services	Is an RTO Negative when training is not in business plan High recruitment difficulty
HR, skills and competition	In mining, manufacturing, accommodation, restaurants and cafes, transport, property and business services, health and community services	Low permanency of employees In white-collar organisation Not knowledge worker or blue-collar organisation Training is important High current skills levels High recruitment difficulty
Regulations	Not in wholesale, retail, property and business, In finance and Insurance	In small organisations Not in white- or blue-collar organisations Not in RTOs Low recruitment difficulties

Table A4 Reasons for using unaccredited training by industry and other organisational variables

Reasons	Industry type	Organisational drivers
Skills	In wholesale Not in electricity, gas, and water	Not in for-profit or not-for-profit or government business enterprise organisations In white-collar organisations In RTOs If training is not in business plan Low current skills
Competition	In communications	If a government business enterprise If a small organisation If low employee permanency If a knowledge worker organisation Not if a blue-collar organisation If training is in the business plan Not if an RTO If training is not important.
Standards	Not in agriculture, forestry and fishing, electricity, gas, and water, construction, wholesale, retail, accommodation, restaurants and cafes, communications, health and community services, culture and recreational services	In not-for-profit organisation Not if a blue-collar organisation Not if an RTO
Responsive workforce	Not in transport	Not if low employee permanency Not if a knowledge worker organisation If a blue-collar organisation If training is in the business plan If high current skills If recruitment is difficult
Regulations	If mining, electricity, gas, and water, finance and insurance Not in accommodation, restaurants and cafes, property and business services	If a blue-collar organisation Not if a white-collar organisation If training is in the business plan If low current skills levels If low recruitment difficulty

Table A5 Reasons for choosing nationally recognised training over unaccredited training by industry and other organisational variables

	Chose nationally recognised training over unaccredited training	Did not choose nationally recognised training over unaccredited training
Industry type	Agriculture, forestry and fishing Electricity, gas, and water Construction Finance and insurance	Manufacturing Wholesale Retail Communications
Organisational size		Small organisation Medium-sized organisation
Employee permanence		Low
Occupational structure		Knowledge worker organisation
Strategic and skills variables	Is an RTO Training is important High current skills levels High recruitment difficulty	Training is not part of a business plan

Support document details

Additional information relating to this research is available in the support document *Modelling the reasons for training choices: Technical paper* which can be accessed from NCVET's website: <<http://www.ncver.edu.au/publications/2147.html>>. The support document contains:

- ✧ Introduction
- ✧ Data issues
- ✧ Modelling the reasons cited for using training types
- ✧ Modelling the training choice between nationally recognised training and unaccredited training
- ✧ References.



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