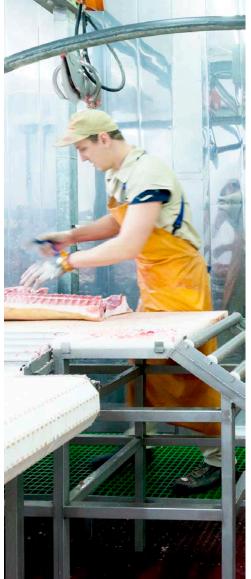


# **Employers' perspectives on training: three industries**

#### **Chandra Shah**

Affiliate, Faculty of Education, Monash University & Adjunct Associate Professor, Centre for International Research on Education Systems, Victoria University







INFORMING POLICY AND PRACTICE IN AUSTRALIA'S TRAINING SYSTEM

#### Publisher's note

The views and opinions expressed in this document are those of the author/project team and do not necessarily reflect the views of the Australian Government, or state and territory government. Any interpretation of data is the responsibility of the author/project team.

For further information on this topic, see the related report, *Analysis of National Workforce Development Fund training in the transport and logistics industry*, available on VOCEDplus <a href="https://www.voced.edu.au">http://www.voced.edu.au</a>.

To find other material of interest, search VOCEDplus (the UNESCO/NCVER international database <a href="http://www.voced.edu.au">http://www.voced.edu.au</a>) using the following keywords: on-the-job training; professional development; retraining; skill upgrading; staff development; training investment; training within industry; work based learning; workplace education and training; workplace learning.

#### © Commonwealth of Australia, 2017



With the exception of the Commonwealth Coat of Arms, the Department's logo, any material protected by a trade mark and where otherwise noted all material presented in this document is provided under a Creative Commons Attribution 3.0 Australia <a href="http://creativecommons.org/licenses/by/3.0/au">http://creativecommons.org/licenses/by/3.0/au</a> licence.

The details of the relevant licence conditions are available on the Creative Commons website (accessible using the links provided) as is the full legal code for the CC BY 3.0 AU licence <a href="http://creativecommons.org/licenses/by/3.0/legalcode">http://creativecommons.org/licenses/by/3.0/legalcode</a>>.

The Creative Commons licence conditions do not apply to all logos, graphic design, artwork and photographs. Requests and enquiries concerning other reproduction and rights should be directed to the National Centre for Vocational Education Research (NCVER).

This document should be attributed as Shah, C 2017, *Employers' perspectives on training: three industries*, NCVER, Adelaide.

This work has been produced by NCVER on behalf of the Australian Government and state and territory governments, with funding provided through the Australian Government Department of Education and Training.

COVER IMAGE: GETTY IMAGES/iStock

ISBN 978-1-925173-79-6

TD/TNC 127.06

Published by NCVER, ABN 87 007 967 311 Level 5, 60 Light Square, Adelaide, SA 5000

PO Box 8288 Station Arcade, Adelaide SA 5000, Australia

Phone +61 8 8230 8400 Email ncver@ncver.edu.au Web <a href="https://www.ncver.edu.au">http://www.lsay.edu.au></a>

Follow us: <a href="https://twitter.com/ncver">https://twitter.com/ncver</a> in <a href="https://www.linkedin.com/company/ncver">https://www.linkedin.com/company/ncver</a>

### About the research

#### Employers' perspectives on training: three industries

Chandra Shah, Affiliate, Faculty of Education, Monash University & Adjunct Associate Professor, Centre for International Research on Education Systems, Victoria University

This research examines workforce training from the perspective of employers in 10 firms across three industries which span urban and regional areas throughout Australia's eastern seaboard. The industries included were: red meat processing, road freight transport and freight forwarding.

#### Key messages

- Employers believe in the critical importance of ongoing workforce training for the survival of the firm.
   Some firms are placing ongoing, whole-of-workforce skills development at the centre of their strategy for the future sustainable growth of their businesses.
- While training practices vary across industries, and sometimes across firms in the same industry, there
  are many similarities.
- Employers' training decisions are affected by a number of issues. These include the:
  - need to comply with industry regulations, particularly those relating to hygiene, and health and safety
  - quality and source of entry-level labour supply, which is affected by working conditions and turnover in the industry
  - availability of a public subsidy for training, which may affect whether firms support full qualifications
  - quality and flexibility of training providers
  - availability of reliable information on the training market.
- Public subsidies for training help firms to offer formal training and partly offset costs, but a firm's decision to provide training support to an employee is generally independent of the receipt of a subsidy. However, in the absence of a subsidy some firms may choose to ration training support for formal qualifications.
- A co-contribution for the cost of training is usually only expected from workers for higher-level qualifications.
- Firms use a combination of learning modes formal, non-formal and informal for the delivery of training, with the emphasis often reflecting industry practices, the availability of a public subsidy, the level of employee experience and the logistics involved in organising training delivery.
- The experience of small firms in the training market can be quite different from that of large firms.
   Small firms could benefit from access to reliable and objective information about the training market.

## Acknowledgments

Firstly, I wish to thank Kate Perkins (Australian Council for Educational Research) for collaborating in this research. Kate helped to develop the research questions for the semi-structured interviews with employers, conducted the interviews, documented the outcomes of the interviews and provided assistance in drafting the final report.

We acknowledge that Skills Service Organisations (SSO) are now responsible for engaging with industry, identifying relevant workplace standards and developing Training Packages. At the time that consultations occurred for this research project, Industry Skills Councils (ISC) held these responsibilities. As such, throughout the report the relevant ISCs will be referenced, rather than the current SSOs.

We acknowledge the input from the Transport and Logistics Industry Skills Council, Agrifood Skills Australia, the National Meat Industry Training Advisory Council and the Customs Brokers and Forwarders Council of Australia for this research. Special thanks to Amanda Thomas, formerly General Manager of Strategy and Policy at the Transport and Logistics Industry Skills Council (TLISC) for facilitating the involvement of the two industry skills councils in this research.

We wish to thank the senior managers at the 10 firms who agreed to participate in this study and who gave up their valuable time to talk to us and answer our questions. Without their cooperation, this study would not have been possible.

Finally, we are also grateful to the two reviewers who provided constructive comments on an earlier draft of this report.

## Contents















Executive summary	7
Scope and method	7
Findings	7
Concluding comments	9
Introduction	10
Context	12
Types of learning in the workplace	12
Types of employer support for training	12
Characteristics of non-formal training	13
Employer training practices in Australia: evidence from surveys	15
Design of the study and method	17
Selection of firms for the study	17
Identifying research questions	17
Conduct of interviews	18
Firm-level training practices	19
Red meat processing	19
Road freight transport	22
Freight forwarding	25
Concluding comments	27
References	29

## Tables and figures

#### **Tables**

1	Participation in formal and non-formal education and training by type of employer support, employees aged 16—65 years, 2011—12 (%)	13
2	Participation rate and average number of activities per participant by type of activity, employees aged 16—65 years who participated in non-formal training, 2011—12 (%)	13
3	Reasons for participating in training by type of activity, employees aged 16–65 years who participated in non-formal training, 2011–12 (%)	14
4	Firms by industry, state, location and size	17
F	igures	
1	Distribution of annual hours of training, employees aged 16—65	1/



This study explores employers' perspectives on workforce training from 10 firms in three industries located in urban and regional areas of five states on Australia's eastern seaboard. The analysis draws on data collected at interviews with senior managers and internal and external trainers in these firms.

The study shows that, while training practices vary across industries, and sometimes across firms in the same industry, there are many similarities. All firms believe that ongoing training of the workforce is critical for the survival of the firm. Many factors determine how employers make decisions on what training to provide, which employees to support and how to deliver the training.

Employer-supported education and training accounts for the largest share of adult education and training in all Organisation for Economic Co-operation and Development (OECD) countries. The benefits flow to individuals, firms and society.

Scope and method

The study included firms from three industries: red meat processing, road freight transport and freight forwarding. The two industry skills councils that agreed to collaborate in the study, Transport and Logistics Industry Skills Council (TLISC) and AgriFood Skills Australia, had responsibility for training package development for the three industries.

About 30 firms were approached to participate in the study but only 10 agreed. The firms vary in size from a small 'paddock to plate' company with nine employees to a large firm with about 1650 employees. All are privately owned, with a majority operating in both domestic and international markets.

Four main research questions provided a framework for the interviews and follow-up discussion:

- What are the drivers of investment in workforce training? Is there an overarching rationale for the decision? What are the benefits?
- What models of skill acquisition and development are used, and why? Is there a preference for a particular type of learning — formal, non-formal or informal?
- How are employees selected for training and what support is provided?
- What are the barriers to implementing a training strategy? What are the enablers?

#### **Findings**

#### Red meat processing

Red meat processing is an important domestic and export industry in Australia. With its reputation for high-quality disease-free produce, Australia is well positioned to take advantage of the expanding export market. The industry is regulated by strict hygiene, health and safety standards. A large number of employees in the industry are process workers or labourers and a significant number are skilled boners, slicers and slaughterers.

Many factors
determine how
employers decide
what training to
provide, which
employees to support
and how to deliver
the training.

The road freight transport firms included in this study have made strategic decisions to reposition their businesses for a sustainable future and are using accredited training as a part of this.

The training practices of firms in this industry are driven by a combination of factors, including regulatory standards, the quality and availability of labour, labour turnover and public subsidy for training. The labour supply is largely from a pool of people with limited employment experience and low educational attainment.

All new entrants to the industry undergo training on commencement of work. While new entrants who are permanent residents are enrolled in formal qualifications (attracting a public subsidy), temporary workers (417 and 457 visa holders) are only trained in basic hygiene, health and safety protocols. As a consequence of the high turnover of labour, only about half of all workers complete the qualification. Non-formal and informal training complement the formal training. All firms encourage and support workers who complete the initial qualification to enrol in a higher qualification or skills sets. Almost all of the training is delivered on the job. Workers with language or literacy problems are assisted, but these problems do not appear to be an impediment in completing lower-level qualifications because most training is on the job and practical. These problems only become an issue when it comes to higher-level qualifications.

#### Road freight transport

The road freight industry dominates the non-bulk freight market in Australia, with larger trucks used for the long distance movement of goods and light commercial vehicles for the final-stage delivery in the cities. Most businesses in the industry are small- and medium-sized enterprises (SMEs) and predominantly employ males, who often have low educational attainment.

There has been no culture of formal qualifications for work in the road freight transport industry. Training practices are changing in some segments of the industry and these are mainly driven by changes in customer service expectations, the rapid growth in online shopping and increased regulations associated with attempts to increase the safety of road users.

The firms included in this study have made strategic decisions to reposition their businesses for a sustainable future and are adopting an approach of whole-of-workforce skills development using accredited training as the core part of this strategy. They expect benefits to flow from adopting the strategy, in the form of: improved road safety; reduced occurrence of workplace injuries; increased potential for adopting new technologies; and formal qualifications for employees who have typically never completed a qualification.

The public subsidy, through the National Workforce Development Fund (now closed), was an important enabler for implementing the strategy, providing all employees with an opportunity to enrol in a formal qualification. However, even without a government subsidy, firms indicated that they would have still gone ahead with implementing their training strategy but that there would have been restricted support to specific skills sets only, thus establishing the foundation for continuous skills development.

#### Freight forwarding

Freight forwarding organises the movement of freight by air, rail, sea and land in an efficient, safe and cost-effective manner, at the same time meeting increasingly stringent security requirements. In Australia, the industry is highly fragmented, with many small local companies operating as well as subsidiaries of major international firms.

Over the last 20 years, work practices in the industry have been transformed by technology, from a paper-based to an online system. Some firms have been considering offshoring some of the backroom functions. However, these trends have not obviated the need for skilled employees with problem-solving abilities.

Qualifications are generally not required for entry-level positions in the industry, but being younger and having good communication skills and a willingness to learn are essential. A mixture of non-formal and informal training on the job is used for skills development and includes online learning of modules from standard industry proprietary software. The current entry-level qualifications in the transport and logistics training package were considered too generic to be of any practical use in freight forwarding, especially international freight forwarding.

Once the employee has achieved the necessary breadth and depth of experience, they are encouraged to enrol in an industry-developed diploma. These diplomas are automatically recognised by the international peak body; this recognition is perceived to be more important than the national accreditation in firms operating internationally. While some employers provide full support for undertaking the diploma, others provide only partial support.

Concluding comments

All firms believe in the critical importance of ongoing training for the survival of the firm. Firms use a combination of learning modes — formal, non-formal and informal — for delivering training, with the emphasis often reflecting industry practices, the availability of a public subsidy, employee experience and the logistics involved in organising training delivery.

Public subsidy for training (for example, traineeships, apprenticeships and enterprise training funds) helps firms to offer formal qualifications and offset part of the total cost of training, but a firm's decision to provide training is generally independent of receipt of a subsidy. In the absence of a subsidy, some firms may choose to ration training support for qualifications to fewer employees or offer support only for those skills sets necessary to meet regulatory requirements. Temporary workers under 457 and 417 (working holiday) visas, when employed, often receive only the training necessary to meet hygiene, health and safety requirements, as they are not eligible for a public subsidy. Only rarely is a co-contribution for training expected of workers and then usually only for higher-level qualifications.

The experience of small firms in the training market can be quite different from that of large firms. Small firms could benefit from access to reliable and objective information about the training market. Currently they have to navigate often-aggressive marketing to get to this information.

This study has shown employers' decisions on training are affected by a number of factors, including: industry regulations; the quality of entry-level labour supply; conditions of work in the industry and labour turnover; the quality and reliability of registered training organisations (RTOs); information about the training market; and the availability of a public subsidy for training.

While caution should be taken not to over generalise the results from this study to all firms and industries, the study has provided insights into employer-supported training that may resonate more widely.

A firm's decision to provide training is generally independent of receipt of a subsidy. But in the absence of a subsidy, some firms may choose to ration training support.

NCVER S

Appropriate policy responses on employer-supported training require an understanding of both employee and employer perspectives.



This report is one of three comprising a study on employer-supported training in Australia. The other two reports provide an analysis of:

- the factors relating to participation and supply and demand in employer-supported training
- the cost of the employer-supported training funded through the National Workforce
   Development Fund and brokered by the Transport and Logistics Industry Skills Council.

This report provides an analysis of the training practices in three industries — red meat, road freight transport and freight forwarding — from the employers' perspective.

The continuing training of the adult workforce is vitally important for competition, innovation and productivity growth (OECD 2003). It accounts for the largest share of all adult education and training in all OECD countries (Bassanini & Ok 2004). The net direct expenditure<sup>1</sup> on structured employer-supported training in Australia during the 2001—02 financial year, the latest year for which data are available, totalled \$3652.8 million. This was offset by \$365.5 million in training-related government subsidies and payments (ABS 2003b). Thus employers' expenditure on training is not insubstantial and, therefore, it is important to understand whether the expenditure provides benefits to the firm.

Cross-country studies have shown positive associations between innovation and the number of firms in the particular country providing employer-supported training (Cedefop 2012). Laplagne and Bensted (1999) showed that skills development of the workforce, the rate of adoption of new technology and the management of these resources all have important complementary roles in improving the productivity and competitiveness of firms.

Employer-supported training provides benefits to employees through higher wages, better career prospects and lower risk of unemployment. Benefits also accrue to the firms providing the training through improved productivity and lower staff turnover. Other workers in the firm may also benefit through the informal transfer of skills from those who received training. Firms other than the training firm may benefit through the recruitment of already trained workers.

Appropriate policy responses on employer-supported training, including addressing efficiency and equity aspects, require an understanding of both employee and employer perspectives. While some employer surveys provide information on enterprise training practices, these are either dated or provide limited information.

The purpose of this study is to describe the practices firms adopt for training their existing workforces. In particular, it aims to understand the factors that affect their investment decisions on training and the types of learning approaches that are adopted to deliver that training.

<sup>1</sup> For a definition of net direct expenditure, see Australian Bureau of Statistics (ABS 2003).

The study used a qualitative research method based on semi-structured interviews with key company personnel and, where appropriate, representatives of registered training organisations working with these companies. While the method has limitations, it is often less costly than a large survey and can provide more detailed information about individual firms, which may not be possible with a large survey. A qualitative study based on semi-structured interviews can also bring out issues unanticipated at the beginning of the research.

While the study is small in scale, involving 10 firms in three industries, and generalising results across all firms and industries may be difficult, the analysis helps to provide a context for broader industry trends.

In the next section we provide a context for the study. The third section describes the method used to conduct the research, then we provide an analysis of the data gathered through the interviews and finally some concluding remarks.

Employer support for training can be in terms of financial support or indirectly through paid time release for employees.



This section provides a context within which to frame the findings from the qualitative research. It describes the type of learning that occurs in the workplace and the nature of employer support for it. The section also summarises the findings from three employer surveys, which include questions about training practices in the workplace.

#### Types of learning in the workplace

Employees' learning can be formal, non-formal or informal. Formal learning, or training, is structured, has specified content, has learning objectives and leads to a formal qualification.

Non-formal training is similarly institutionalised, intentional, planned and has learning objectives, but it does not lead to a formal qualification. Activities considered to be in the category of non-formal training include attending seminars, participating in organised on-the-job training provided by supervisors or co-workers or undertaking computer-assisted structured learning (including online learning).

Informal learning, on the other hand, includes learning by doing; being shown how to perform a task on the job as the need arises; acquiring knowledge and skills relevant to performing a job through such activities as reading manuals or training notes; learning by watching other workers; participating in unstructured computer-assisted training etc. Activities can range from simple repetitive tasks to quite complex tasks and underpin the saying that 'practice makes perfect'. The accumulation of tacit knowledge, 2 necessary for the operation of organisations, is largely a result of informal learning.

Data from the 2011—12 Survey of Adult Skills (PIAAC) for Australia show that:

- 98.2% of employees reported participating in informal learning
- 70.1% of employees reported participating in either formal or non-formal training, with more participating in non-formal training
- 16.8% of employees participated in both formal and non-formal training.

#### Types of employer support for training

Employer support for training can be in terms of financial support or it can be given indirectly through paid time release for employees. It may also be less tangible, for example, in the form of the provision of a mentor for the employee. Employees may contribute to the cost of the training by making a financial contribution, accepting lower wages while training, trading-off wage increases or foregoing leisure time to undertake the training. Government support is often provided for employee training through programs such

<sup>2</sup> As opposed to formal, codified or explicit knowledge, tacit knowledge is less easy to transfer between two people through writing or verbalising. It is knowledge acquired through personal experience from working in a particular firm.

as apprenticeships and traineeships, and was provided by the National Workforce Development Fund and the Industry Skills Fund (both of which are now closed).

Analyses of data from the Survey of Adult Skills (PIAAC) in table 1 show that:

- 83.9% of employees who undertook formal or non-formal training received some kind of employer support, with a majority receiving both monetary and time support.
- 87.1% of employees who undertook non-formal training received employer support compared with 59.4% of those who undertook formal training.
- Whether non-formal or formal, the vast majority of employees who undertook employer supported training believed it was directly relevant to their work.

There are two possible reasons for the difference in the support for the two types of learning. First, formal training generally costs more than non-formal training. Second, non-formal training may include more firm-specific skills of immediate benefit to the firm.

Table 1 Participation in formal and non-formal education and training by type of employer support, employees aged 16–65 years, 2011–12 (%)

Type of education and training	Type of employer support				
	Only monetary	Only time	Monetary and time	No support	
Formal	5.1	28.9	25.4	40.6	100.0
Non-formal	5.1	20.8	61.3	12.9	100.0
Formal or non-formal	4.6	22.1	57.1	16.1	100.0

Notes: Calculations use full sampling weights and exclude missing values.

Excludes 16 to 19-year-olds in compulsory education at the time of the interview.

Source: ABS (2015).

#### Characteristics of non-formal training

#### Types of activities

Employees often participated in more than one type of non-formal activity. The most common activity in which they participated was on-the-job training, followed by seminar or workshop attendance (see table 2). The average number of times they participated in on-the-job training activities was also higher than the average for any other activity.

Table 2 Participation rate and average number of activities per participant by type of activity, employees aged 16–65 years who participated in non-formal training, 2011–12 (%)

Type of non-formal training activity	% participating	Average number of activities per participant	
Open or distance education	11.4	3.0	
On-the-job training activity	75.7	5.1	
Seminar or workshop	59.3	3.7	
Other kind of course or private lesson	14.1	4.9	

Notes: Calculations use full sampling weights and exclude missing values.

Excludes 16 to 19-year-olds in compulsory education at the time of the interview.

Source: ABS (2015).

#### Annual hours of training

The annual hours of non-formal training ranged widely. About 40% of employees who undertook the training spent between one and 25 hours, while about 10% spent more than

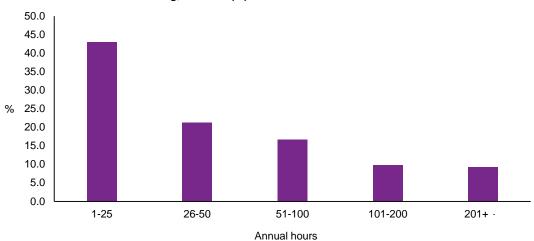
who undertook formal or non-formal training received some kind of employer support.

83.9% of employees

Roughly half the surveyed employees undertook training to improve the way they did their current job or their career prospects.

100 hours (see figure 1). The average hours of training were more than 100 as a result of the skewed distribution.

Figure 1 Distribution of annual hours of training, employees aged 16–65 years who participated in non-formal training, 2011–12 (%)



Notes: Calculations use full sampling weights and exclude missing values.

Excludes 16 to 19-year-olds in compulsory education at the time of the interview.

Source: ABS (2015).

#### Reasons for training

Analyses of data from the Survey of Adult Skills (PIAAC) show that employees have a variety of reasons for undertaking training (see table 3). About half undertook the training to improve the way they did their current job or improve their career prospects. Another common reason given, although not among those who undertook on-the-job training, was to increase their knowledge and skills in an area of personal interest. About a fifth felt obliged to participate in training.

Table 3 Reasons for participating in training by type of activity, employees aged 16–65 years who participated in non-formal training, 2011–12 (%)

	Type of non-formal training activity			All	
Reason for participating	Open or distance education	On-the-job training activity	Seminar or workshop	Other kind of course or private lesson	
To do job better or improve career prospects	42.4	56.4	48.6	47.4	52.7
To be less likely to lose job	0.0	0.5	0.2	0.3	0.4
To increase prospects of getting a job, or changing a job or profession	18.4	2.7	2.3	19.2	3.8
To start own business	2.5	0.1	0.5	0.3	0.3
Obliged to participate	1.9	24.0	18.4	8.3	20.6
To increase knowledge or skills on a subject of personal interest	23.1	12.2	24.8	15.7	17.3
To obtain a certificate	0.0	2.3	2.1	4.8	2.3
Other	11.7	1.8	3.2	4.0	2.7
Total	100.0	100.0	100.0	100.0	100.0

Notes: Calculations use full sampling weights and exclude missing values.

Excludes 16 to 19-year-olds in compulsory education at the time of the interview.

Source: ABS (2015).

#### Employer training practices in Australia: evidence from surveys

The most recent national survey of employers on training practices in the workplace was conducted in 2002 (ABS 2003a). It showed that in the year 2001—02:

- 81% of all employers provided some training for their employees
- 41% provided structured training and 79% provided unstructured training<sup>3</sup>
- larger employers were more likely than smaller employers to provide structured training;
   98% of large, 70% of medium and 39% of small firms provided training.<sup>4</sup>

Firms in the government, administration and defence were most likely to provide structured training and those in the transport and storage least likely to.

The predominant reason given by employers for providing structured training was to maintain professional status or to meet industry standards. Other common reasons included staff development and to improve the quality of goods and services, although the reasons varied substantially across industries. Among firms that provided training, the most common reason why even more training was not provided was because these firms felt the workers were adequately trained. This was also the common reason for not providing training among firms that did not provide any training, although more than a third of them were meeting their training needs through unstructured methods. The overwhelming majority of employers who provided structured training used external training providers, with a slightly higher proportion using private providers rather than TAFE (technical and further education) institutes.

The *Employers' use and views of the VET system 2015* is the latest in a series of employer surveys on training produced by the National Centre for Vocational Education Research (NCVER 2015). Its focus is vocational education and training (VET). It shows that:

- More than three-quarters of all firms used informal training to meet their skilling needs.
- About a quarter of all firms had employed apprentices and trainees in the previous 12 months.
- About a fifth of all firms provided nationally recognised training (excluding apprenticeships and traineeships) for their employees, with about half choosing a private provider to deliver the training. The main reasons for providing this type of training were to:
  - provide skills for the job
  - meet legislative, regulatory and licensing requirements
  - help develop staff careers.
- About half of all firms used unaccredited training. The main reasons for providing this type of training were to:
  - provide skills for the job
  - meet and maintain professional and industry standards.
- About 10% of firms provided no training to their employees.

The predominant reason for providing structured training was to maintain professional status or to meet industry standards.

<sup>3</sup> Structured training includes activities that have a specified content or predetermined plan and unstructured training includes activities that do not have a specified content or predetermined plan.

<sup>4</sup> Large firms have 100 or more employees, medium firms 20-99 and small firms fewer than 20.

Firms recognise the negative effect an inadequately skilled workforce can have on business and the critical role training plays in meeting quality standards and achieving innovation.

The Victorian Skills and Training Employer Survey provides a recent snapshot of employers' perceptions of training and skills requirements in Victoria (Wallis 2015). The survey is a representative sample of firms in 19 industries across nine regions. The report notes that firms are mindful of the negative effect of an inadequately skilled workforce on business and they recognise the critical role training plays in meeting quality standards and for innovation. Firms also tend to use non-formal and informal training when faced with costs pressures. A number of questions about training practices in the survey were in the context of overcoming skill shortages and skill gaps. As the definitions of many terms in the survey appear to be non-standard, comparisons with information from other data sources are difficult. The survey finds employers are becoming wary of using private training providers for training delivery because of having experienced poor-quality service. This is not surprising given the extensive recent media coverage on the issue.



## Design of the study and method

The study uses qualitative research methods to gather data from firms on their training practices. Due to limited resources available for the project, the study is necessarily small in scale. The study design involved semi-structured interviews with senior personnel who manage the training or human resources at the firm and, where available, internal and external trainers.

Many firms have undergone several transformations to respond to changing market needs and conditions.

#### Selection of firms for the study

The study was narrowed to firms in three industries: red meat processing, road freight transport and freight forwarding. The two industry skills councils that agreed to collaborate in the study, Transport and Logistics Industry Skills Council (TLISC) and AgriFood Skills Australia, had responsibility for training package development for the three industries.

With the assistance of the industry skills councils, industry peak bodies and the providers working in these industries, about 30 firms were approached to participate in the research. Ten firms agreed — four from red meat processing and three each from freight forwarding and road transport.

The firms are located in both urban and regional areas and across five states on the eastern seaboard. They vary in size from a small 'paddock to plate' company with nine employees to a large firm with about 1650 employees. All are privately owned, by seven family businesses that had been in operation for several generations. Many firms had undergone several transformations over time to respond to changing market needs and conditions. All but one company was Australian-owned. Seven companies operated both domestically and internationally, with some operating across state borders.

Table 4 shows the industry, state, location and size of each firm.

Table 4 Firms by industry, state, location and size

Industry	State	Location	Firm size
Red meat	South Australia	Regional	Large
Red meat	Victoria	Regional	Large
Red meat	Victoria	Metro	Large
Red meat	Victoria	Regional	Small
Road freight	Tasmania	Regional	Medium
Road freight	Queensland	Metro	Large
Road freight	New South Wales	Metro	Large
Freight forwarding	Queensland	Metro	Medium
Freight forwarding	Queensland	Metro	Medium
Freight forwarding	New South Wales	Metro	Medium
	Red meat Red meat Red meat Red meat Road freight Road freight Road freight Freight forwarding Freight forwarding	Red meat South Australia Red meat Victoria Red meat Victoria Red meat Victoria Red meat Victoria Road freight Tasmania Road freight Queensland Road freight New South Wales Freight forwarding Queensland Freight forwarding Queensland	Red meat South Australia Regional Red meat Victoria Regional Red meat Victoria Metro Red meat Victoria Regional Road freight Tasmania Regional Road freight Queensland Metro Road freight New South Wales Metro Freight forwarding Queensland Metro Freight forwarding Queensland Metro

#### Identifying research questions

Following the initial analysis of data from the Survey of Adult Skills (PIAAC), discussed in the previous section, and the literature review, also used in the other two reports that make up the study on employer-supported training, we identified potential issues regarding training practices to explore with employers. These were refined further following initial consultations with several industry bodies and two firms.

Four main research topics provided a framework for the interviews and follow-up discussion:

- What drives the firm to invest in workforce training? Does the firm have an overarching rationale for the decision to invest? What benefits is it expecting?
- What models of skill acquisition and development are used and why? Is there a preference for a particular type of learning — formal, non-formal or informal?
- How are employees selected for training and what is the nature of the support they receive?
- What are the barriers to implementing a training strategy? What are the enablers?

#### Conduct of interviews

Following agreement to participate in the study, the firm was sent a request for a face-to-face interview at their premises, together with the list of issues for discussion, given above. Each interview lasted for up to two hours, sometimes with more than one person in the firm, and in many instances this was followed up with a telephone call or an email for further elaboration or clarification of the issues discussed at the interview. In a small number of cases, it was not possible, despite several attempts to do so, to organise a face-to-face interview in the timeframe for the research and in these instances the interview was conducted via teleconference.

# Eirm-level training practices

This section provides an analysis of training practices at the firm level in the red meat processing, road freight transport and freight forwarding industries. For each industry a context is first provided, followed by analyses of the rationale for training, the models of skill acquisition, the selection of employees, and enablers and barriers to training.

Consumers are increasingly concerned about food hygiene and safety - a single firm failing to meet the required standards can adversely affect the whole industry.

#### Red meat processing

#### Context

Red meat processing is an important industry in Australia. In 2015-16 the industry employed 38 000 workers in over 700 enterprises (IBISWorld 2016). Global markets for red meat continue to expand, particularly with the rising demand for meat-based protein among the emerging middle class in Asia. With its reputation for high quality, disease-free produce, Australia is well positioned to take advantage of this trend. In spite of stiff competition from low-cost countries such as Brazil and Argentina, Australia's export markets continue to expand. While turnover in the industry is high, profit margins are low.

Domestic and international consumers are increasingly concerned about food hygiene and safety. The failure of a single firm to meet required standards can have adverse effects for the whole industry. To minimise risk, an Australian-based regulatory system that is well regarded has been put in place, along with industry-wide quality assurance frameworks.

The industry has worked collaboratively over the last couple of decades to develop clear standards, encapsulated in a nationally accredited training package developed by the National Meat Industry Training Advisory Council (MINTRAC). Prior to the development of accredited training, learning in the industry was either non-formal or informal, and on the job.

The industry is labour-intensive, and has been notoriously difficult to automate (Norton and Rafferty 2010). Work is physically demanding and potentially dangerous. A large majority of employees in the industry are process workers or labourers. Almost all new entrants start in this role, whatever their background or qualifications in other fields. About a third of them progress to become skilled boners, slicers and slaughterers, and a small percentage become supervisors, managers, trainers or (externally employed) meat inspectors. Career paths exist for employees within the firm and the industry. Many of the current managers started out as labourers themselves.

The industry's reputation for unappealing 'dirty work' puts it at a disadvantage relative to other industries in attracting and retaining workers. New recruits to the industry often do not hold formal qualifications and have little or no employment experience. Many are migrants with limited English language skills.

Labour turnover is high in the industry. In two firms in our sample, about 20% of the entry-level workforce was continually being replaced. In the third firm, the turnover of

All employers emphasised the critical importance of ongoing skills development for the survival of the firms, and the industry in general.

labourers was as high as 50% on some occasions. This company also employed a number of 457 visa holders, <sup>5</sup> but was more heavily reliant on 417 visa holders, who were generally sourced through several labour hire firms. <sup>6</sup> During the peak season, this group made up half the workforce. The second regional firm had a more stable workforce, and its 20% employee turnover was low by industry standards. However, this firm also employed 417 visa holders — about 20 — 'to fill the gaps'.

#### Investment in training: rationale and expected benefits

All employers emphasised the critical importance of ongoing skills development for the survival of the firms, and the industry in general. Decisions on training were driven by changing market expectations about products; domestic and international food safety regulations; workplace safety; and, the need to improve productivity and minimise waste. Ongoing training was essential in these areas as it ensured safety standards were met all of the time; workplace accidents were reduced; and, employees gained skills, including the opportunity to gain formal qualifications.

One employer, who used training as a key business strategy, believed that training provided a morale boost for the workers and encouraged them to improve productivity, their commitment to quality and customer satisfaction.

By offering employment and skills development to people who otherwise had few such opportunities, the employers felt that they were actually doing a social good.

#### Models of skill acquisition

All permanent resident entry-level process workers were enrolled as trainees in the Certificate II in Meat Processing and immediately commenced with training modules in food hygiene and workplace health and safety. Skills development involved a combination of formal, non-formal and informal learning.

Formal industry-approved training was provided by an external registered training organisation. Formal assessment by the external RTO provided the validation required by regulatory authorities and provided assurance to employers that the workers could consistently perform tasks to the quality and safety standards required. While the certificate II involved some classroom-based training at work, it was integrated into daily work as much as possible. Learning for the Certificate III in Meat Processing occurred almost entirely on the job. The time taken to complete the qualification depended on how easily the worker could be rotated to different tasks without too much disruption to production. Skills sets were used to broaden the skills of the workers who had completed the certificate III.

<sup>5</sup> A person who has qualified for a 457 visa has demonstrated skills at the level of a Certificate III in Meat Processing and can work in Australia for up to four years.

<sup>6</sup> According to one firm, the costs include an award rate for the work to be performed, on-costs and a premium. The use of 417 visa holders is controversial, with media reports that some labour hire firms do not pass on the full award rate and/or charge visa holders excessive fees for accommodation, transport etc. The meat processors in this study refuted any suggestion that 417 visa holders at their plants were exploited. They were also adamant that they would welcome the opportunity to keep those visa holders who wished to stay longer, because they were generally reliable and efficient workers.

On-the-job non-formal training to reinforce and enhance formal training was provided by supervisors, team leaders and in-house trainers. In the firm at the forefront of creating a learning culture, employees were encouraged to be involved in about a score of non-formal training activities each year. Team leaders and supervisors also undertook non-formal training to improve communication skills, cultural understanding and leadership.

Informal learning was encouraged and facilitated through work rotations. Work organisation was structured to give employees the opportunity to practise new skills until they gained the speed and dexterity necessary to meet line production targets. Internal trainers, supervisors and team leaders all had a role in mentoring workers.

The 417 visa holders, in the two firms that employed them, were assigned jobs requiring limited skills and training but they still had to be trained in basic health and safety and hygiene protocols. As the training of these workers did not attract a public subsidy, the training was non-formal and delivered by internal trainers.

Selection of employees for training

All new entrants not on 417 or 457 visas are enrolled in formal training, irrespective of their hours of work or employment contract or whether or not they hold a qualification. Employees who stayed with the firm generally completed the qualification in about 12 months but because of high turnover only half of those who commence complete the qualification. Those who completed this initial qualification were encouraged to enrol for the certificate III, as completion was considered to be a signal of reliability and aptitude, and many did enrol in the higher-level qualification. However, employees who chose not to enrol were not less valued by their firm for their decision.

Lack of language, literacy and numeracy (LLN) skills did not seem to be a major impediment for a career in the industry. Much of the learning and assessment was undertaken through practical demonstration, requiring limited LLN skills. The firms provided translators for those who struggled with English. The translators worked with groups of employees from the same linguistic background. Training package modules were also available in a variety of languages. There were some suggestions that LLN issues were perhaps barriers to enrolling in higher-level qualifications for some employees. Problems also existed in convincing some employees to train to become quality assessors, trainers and supervisors, despite being offered financial assistance and time release for training.

#### Enablers and barriers to training

The three large firms had similar perceptions about enablers and barriers to workforce training in the industry. The experience of the small firm was different and unique.

For the large firms, the availability of government subsidies was an enabler for supporting formal training and sometimes skills sets. Without the subsidy, some of the firms were inclined to provide just the necessary skills sets for the job, complemented by non-formal and informal training. Formal training would then be restricted to selected employees.

Firms with plants in different states had to negotiate the rules and regulations for accessing the public subsidy, which varied across jurisdictions and over time. In one jurisdiction the subsidy was paid only if the employee was retained for at least six months after completion of the qualification. When the subsidy is paid progressively rather than when the qualification is completed, it is possible for firms to use the subsidy to offset the costs of

Lack of language, literacy and numeracy skills did not seem to be a major impediment for a career in the red meat processing industry.

The scheduling of formal training and job rotation, while also ensuring that production was minimally affected, was identified as a challenge.

their entry-level training. Nevertheless, firms still had to cover the considerable costs of time release for training, for which employees generally received a wage.

Employers expressed concern about the quality and dedication of some of the external RTOs, some of whom lacked the desire to understand and meet the needs of the firm. Specific concerns included the use of the superficial 'tick and flick' approach to training and assessment, a lack of up-to-date knowledge of the industry and technology, and unqualified trainers (in one instance the trainer had been a baker). The firms were however satisfied with their current RTOs, whom they believed offered training delivery that was flexible enough to suit the firm's production and audit schedules, and they employed well-qualified trainers. Most trainers were based at the firm and, therefore, had developed a sound understanding of the firm's ethos, priorities and protocols.

The scheduling of formal training and job rotation, while also ensuring that production was minimally affected, was identified as a challenge and firms were increasingly investing in frontline management skills (formal and non-formal) to meet this challenge.

The training experience of the small employer in the sample was unique and may typify the experience of other small firms. The company was a boutique 'paddock to plate' establishment employing five qualified butchers, supported by a casual labourer, and three retail staff. In contrast to the larger employers, the owner of this company chose to hire people with the required meat processing skills. After several unsatisfactory experiences in the training market he had made a decision to use informal on-the-job learning for staff development.

This approach was prompted by the departure of a succession of apprentices hired by the firm to train as butchers. The firm's attempts to provide structured training for its retail staff using an external RTO had prompted further disillusionment with the training market. The RTO, in return for full upfront costs, had promised training for the retail employees based on government-subsidised traineeships, which would eventually cost nothing to the firm. Unfortunately the training was never delivered nor the upfront costs refunded.

The experience of this small firm is perhaps a reflection of the current state of the training market. Access to quality information about the training market from a reliable third party may be invaluable for cash-strapped small businesses that lack the market power and clout of a larger firm when negotiating with an RTO. This good example may explain why small firms often display a preference for informal training for staff development.

#### Road freight transport

#### Context

The road freight industry dominates the non-bulk freight market in Australia, with larger trucks used for the long-distance movement of goods, including interstate movement, and light commercial vehicles for the final-stage delivery in the cities. In 2015-16, about 41 000 enterprises operated in the industry, the vast majority being small- to medium-sized enterprises (SMEs). Due to intense competition in the industry, profit margins are low. The industry employed 146 000 people in 2015-16, mostly males with low educational qualifications (IBISWorld 2016).

The industry is highly regulated, with many reporting requirements which some employers find challenging. The growth of super-hubs and distribution centres is changing business practices, the composition of vehicle fleets and the associated skills needs for drivers. SMEs report difficulty in recruiting and retaining skilled workers because of poaching by larger firms. The industry is not perceived as an attractive career choice by young people.

Although there has always been some assistance provided to employees to gain the various drivers licences required in the industry, road freight transport has not had a culture of formal qualifications for work in the industry. There are signs of change in some segments of the industry, mainly driven by changes in customer service expectations, the rapid growth in online shopping and the increased regulations associated with attempts to increase the safety of road users.

Small- and mediumsized enterprises report difficulty in recruiting and retaining skilled workers because of poaching by larger firms.

#### Investment in training: rationale and expected benefits

The three firms participating in this study operated in different markets and in different parts of the country. All had made strategic decisions to reposition their businesses and were in the process of implementing transformational change processes, including whole-of-workforce skills development using accredited training, to achieve business objectives.

Each firm in the sample was acutely aware that their drivers in particular were at the interface with customers in a highly competitive and astute market. As one employer observed: 'drivers are the visible part of the company brand and needed to show they were an integral part of the business'. If drivers were to assume this role effectively, then they needed to have a broader appreciation of what the role entailed and be given training to acquire skills to effectively interact with customers.

As a result of adopting a strategic plan, the firms expected benefits in the form of improved road safety; reduced occurrence of workplace injuries; increased potential for adopting new technologies; and, formal qualifications for employees who typically never had completed a qualification. As one employer explained:

Someone might have been working for us for ten years, and they've got nothing concrete to prove what they can do! We wanted to show that we valued their skills. It was a thank you to them as well as a good outcome for us.

The initial reaction from employees was resistance to change but once they were convinced of the benefits, the results were impressive, with observable gains in self-esteem and confidence, which had a direct impact on their work.

#### Models of skill acquisition

The turnaround in employee responses to training can be attributed, at least in part, to the training delivery method. Although each firm approached the task in its own unique way, there were parallels across all of them. First, the employees' experience was recognised through formal recognition of prior learning (RPL) processes. Second, training was largely delivered on the job, with very little classroom or 'book-based' learning. This was important for employees who had negative school experiences. In one firm, trainers worked one on one with truck drivers as they completed their delivery rounds, stopping by the side of the road to demonstrate and discuss certain aspects of the training before being dropped off at a predetermined point to wait for the next driver. Another company developed a complex

While language, literacy and numeracy skills were generally not an issue in the road freight transport industry, one employer noted that some employees struggled when embarking on higher-level qualifications.

system of off-the-job, on-the-job and simulated activities for drivers. Work was rostered during quiet times for the business to allow groups of workers to take time off to work on the off-the-job activities for their qualification.

While some employees chose to undertake skills sets only, the vast majority enrolled for and completed full qualifications at certificate III or IV level. A small number then chose to progress to higher qualifications.

#### Selection of employees for training

All employees were given the opportunity to enrol in a formal qualification. Employees wanting to go to the next level of training were encouraged with full employer support. One firm restricted full support for leadership training to those employees who demonstrated aptitude for leadership roles, while others who still wished to undertake the training were offered time release but no financial support.

While language, literacy and numeracy skills were generally not an issue because of the hands-on design of course delivery, and support for LLN was provided where required, one employer noted that some employees struggled when embarking on higher-level qualifications, which required more classroom-based learning, particularly written assessment. However, with additional help with LLN, most were able to complete the qualification.

#### Enablers and barriers to training

The initial cynicism of employees was a significant barrier but once enough people experienced the benefits of skills development, their success became infectious and encouraged others to follow.

A government subsidy made a difference to the extent to which firms were able to implement their visions. Each company accessed various sources of government funding, including the now defunct National Workforce Development Fund, which only supported enrolments in formal certificate III or higher-level qualifications for existing workers and required firms to supply up to two-thirds of the cost of training.

Without a government subsidy, the firms would have still forged ahead with their strategy but would have restricted the program to supporting training based on specific skills sets. This, they believed, would have at least laid the foundation for continuous skills development. One firm that had just merged with another, while still committed to the notion of the continuous skills development of the workforce, was now looking for tangible evidence of benefits from further investment in training.

Finding an RTO to provide the training and the RTO being flexible enough to meet the firm's needs were also challenges for the firms in this industry. One of the main requirements was for the training to be delivered with minimum disruption to the firm's schedules, particularly at peak operating periods.

The organisation of the training presented significant logistical problems in each firm, with associated costs to the firm and the RTO, and required mutual understanding and trust for its success. All companies established dedicated teams to design and manage the process, with two employing change-management specialists to lead and liaise with senior management.

#### Freight forwarding

#### Context

Freight forwarding organises the movement of freight by air, rail, sea and land in an efficient, safe and cost-effective manner. The tasks involved in the industry include purchasing container space, consolidating bundles of freight belonging to different clients, planning and overseeing the logistics and negotiating the complexities of each country's import and export regulations and increasingly stringent security requirements. In Australia, the industry is highly fragmented, with over 21 000 people employed in over 1200 businesses during 2015-16 (IBISWorld 2016). The industry includes a large number of small local firms competing with each other as well as with local branches of major international firms. Some firms specialise in freight forwarding only, while others manage a customer's full supply chain.

Despite the adoption of digital technology and a tentative move towards offshoring certain tasks, the need still exists for skilled employees to build and manage long-term client relationships.

#### Investment in training: rationale, drivers and benefits

Over the last 20 years, work practices in the industry have been transformed by technology, from a paper-based system to an online system. Some firms have been considering offshoring some of the backroom functions.

According to employers interviewed for this study, the adoption of digital technology and the tentative move to offshoring of certain backroom tasks has not reduced the need for skilled employees with the knowledge and interpersonal skills to build and manage long-term client relationships. Employees also need problem-solving skills, as well as the ability to attend to fine detail at every step of the chain.

The survival of the firm depends on its keeping abreast of developments in technology, which means ongoing skills development for the staff.

#### Models of skill acquisition

Qualifications are generally not required for entry-level positions in the industry. The employers interviewed for the study looked for young people to fill entry-level positions who had good communication skills and who showed a willingness to learn, although one employer occasionally made an exception and recruited university graduates from any field of study.

There is a belief in the industry that the only way to become a skilled operator was to start at the bottom and 'learn the ropes', which meant that initial training was delivered through a mixture of non-formal and informal training. The training was entirely on the job and supervised and mentored by an experienced operator. It included online learning modules from a proprietary software, which is the industry standard. The current entry-level qualifications in the transport and logistics training package were considered too generic to be of any practical use, especially in international freight forwarding.

<sup>7</sup> As 75% of freight forwarding companies use the same software; these skills are highly transferable.

Managers believed that employees stood to gain significant personal benefits from training and therefore it was appropriate that they shared in covering the cost.

Once the employee had achieved the necessary breadth and depth of experience, they were encouraged to enrol in an industry-developed diploma in customs broking or the newly developed diploma in international freight forwarding. These diplomas are automatically recognised by the international peak body and are perceived to be more important than the national accreditation.

In each firm, the senior managers also had a key role in employee training, ensuring that the firms' accumulated tacit knowledge was shared with the trainees. For example, the director of one firm spent most of her time providing advice; helping employees reflect on what was working and not working in their handling of each client; and, facilitating the development of their problem-solving skills.

Occasionally, more experienced employees were encouraged and supported to attend seminars and workshops, usually run by the industry peak body. One firm only sent employees to technical workshops as it viewed programs such as 'team building' as not particularly useful.

#### Selection of employees for training

New employees had to demonstrate an interest in working in the industry and an aptitude for learning during their six-month probationary period. Occasionally, additional time was given for this purpose but there were limited options for those who failed and they generally left the firm. One firm however made an attempt to match the employee's skills with other tasks that could be performed in the firm, provided the employee was reliable and showed commitment.

Employers covered all costs of training and provided time release from work up to the point when the individual was skilled and experienced enough to enrol in one of the diplomas noted earlier. Employer support for undertaking the diploma varied, with one firm prepared to cover all costs and strongly encouraging all employees to enrol. In the other firms, employees were only partly funded and received some time release. The managers in these two firms believed that employees stood to gain significant personal benefits from the training and therefore it was appropriate that they shared the cost of training at this level. As people with the diploma qualifications were at risk of being poached by rival firms, this was an added reason for the firms to only partially support the training.

#### Enablers and barriers to training

For the reasons discussed above, the current entry-level qualifications in the transport and logistics training package were a barrier to employees having their initial training formally recognised. On the other hand, the initial on-the-job training provided by all firms in the study provided a robust platform for advanced formal training, which was also internationally recognised.

Employer support and encouragement enabled many employees to undertake higher-level qualifications. Online training modules covering rapidly evolving technology also enabled employees to engage in ongoing skills development.

Employers identified few barriers to ongoing skills development in the industry and were proud not to have to rely on a public subsidy to fund training in the industry.

## **Concluding comments**

This study has provided an analysis of employers' perspectives on training from a small number of firms in three industries. The models of skills development and employer support for training vary, not only across industries, but also across firms, although there are some common training practices within the industries.

All firms believe in the critical importance of ongoing training for the survival of the firm. For some firms, training is necessary for meeting regulations about hygiene, health and safety. Employer-supported training helps to solve difficult skilled labour supply issues in industries whose main source of new entrants is often people with limited employment experience and educational attainment. Some firms are using a whole-of-workforce skills development program as part of a broader business strategy to reposition themselves for a more sustainable future.

Firms use a combination of learning modes — formal, non-formal and informal — for delivering training, with the emphasis often reflecting industry practices, availability of a public subsidy, the experience of employees and the logistics involved in organising training delivery. Firms in the red meat processing and road freight transport industries, for example, use nationally accredited training to meet strict regulatory and quality assurance requirements. Tradition and a lack of an accredited entry-level qualification acceptable to the industry mean that the initial training in freight forwarding, especially international freight forwarding, is largely non-formal and informal. The higher-level qualifications are however formal and internationally recognised because the course includes learning to master the proprietary software used by 75% of international freight forwarding firms.

A public subsidy for training (for example, traineeships, apprenticeships and enterprise training funds) helps firms to offer formal qualifications and offset part of the total cost of training, but a firm's decision to provide training is generally independent of the receipt of a subsidy. In the absence of a subsidy, some firms, for instance, red meat processing and road freight transport, may choose to limit training support for qualifications to fewer employees or offer support only for the skill sets necessary for meeting regulatory requirements. Firms that employed 417 visa holders use non-formal and informal internal training since a public subsidy is not available for these workers.

For more advanced training, some employers expressed a preference for supporting employees who showed aptitude as well as a willingness to learn. In industries with high turnover, for instance, red meat processing, most employees are encouraged to enrol for a higher-level qualification after they have completed the entry-level qualification. Firms don't often expect employees to contribute towards the cost of their training. Those who concluded employees gained significant personal benefit from the training believed it was only fair that they made a contribution.

While it is difficult to generalise across all industries and all firms in this study, there are lessons to be learnt from the study which may not be evident in a large-scale survey of employers. For instance, one of the problems faced by small firms is easy access to reliable information on the increasingly complex training market. Cash and time-poor small firms seem to find navigating the training market difficult. This points to a need for good and

Employer-supported training helps solve difficult skilled labour supply issues in industries whose new entrants are often people with limited employment experience and educational attainment.

reliable training market information from a third party, information with a focus only on the public interest.

This study has shown employers' decisions on training are affected by a number of factors. These include industry regulations; the quality of entry-level labour supply; conditions of work in the industry and labour turnover; the quality and reliability of registered training organisations; information about the training market; and, the availability of a public subsidy for training.



- ABS (Australian Bureau of Statistics) 2003a, *Employee training expenditure and practices*, cat.no.6362.0, ABS, Canberra.
- ——2003b, Employer training expenditure and practices, Australia, 2001—02, cat.no.6362.0, ABS, Canberra
- ——2015, Programme for International Adult Competencies 2011—12 basic reissue 2, Australia and international comparison Ver PIAAC12B, CURF, CDROM, cat.no.4228.0.30.001, ABS, Canberra.
- Bassanini, A & Ok, W 2004, How do firms' and individuals' incentive to invest in human capital vary across groups?, OECD, Paris, viewed December 2013, <a href="http://www.oecd.org/dataoecd/4/8/34932892.pdf">http://www.oecd.org/dataoecd/4/8/34932892.pdf</a>>.
- Cedefop 2012, *Learning and innovation in enterprises*, Cedefop working paper no.27, Publications Office of the European Union, Luxembourg.
- IBISWorld 2016, *Road freight transport in Australia*, IBISWorld, viewed March 2017, <a href="http://www.ibisworld.com.au/industry/default.aspx?indid=456">http://www.ibisworld.com.au/industry/default.aspx?indid=456</a>.
- Laplagne, P & Bensted, L 1999, 'The role of training and innovation in workplace innovation', Productivity Commission Staff Research Paper, Ausinfo, Canberra.
- NCVER (National Centre for Vocational Education Research) 2015, *Employers' use and views of the VET system 2015*, NCVER, Adelaide.
- Norton, K & Rafferty, M 2010, Work, skills and training in the Australian red meat processing sector, NCVER, Adelaide.
- OECD (Organisation for Economic Co-operation snd Development) 2003, *Employment Outlook 2003*, OECD, Paris.
- Wallis 2015, *Victorian Skills and Training Employer Survey*, Report to Department of Education and Training, Victoria, Wallis Consulting Group.



#### **National Centre for Vocational Education Research**

Level 5, 60 Light Square, Adelaide, SA 5000 PO Box 8288 Station Arcade, Adelaide SA 5000, Australia

Phone +61 8 8230 8400 Email ncver@ncver.edu.au Web <a href="https://www.ncver.edu.au">http://www.lsay.edu.au> Follow us: <a href="https://twitter.com/ncver">https://twitter.com/ncver</a> <a href="https://www.linkedin.com/company/ncver">https://www.linkedin.com/company/ncver</a>

