

DOCUMENT RESUME

ED 419 992

CE 076 707

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 TITLE Training and Learning in Small Business. Issues for Research.  
 INSTITUTION Technology Univ.-Sydney, Broadway (Australia). Research Centre for Vocational Education and Training.  
 SPONS AGENCY Australian National Training Authority, Brisbane.  
 ISBN ISBN-1-86365-409-7  
 PUB DATE 1997-05-00  
 NOTE 27p.  
 PUB TYPE Reports - Research (143)  
 EDRS PRICE MF01/PC02 Plus Postage.  
 DESCRIPTORS Educational Research; Foreign Countries; \*Industrial Training; \*Learning Processes; \*Research Methodology; \*Small Businesses; \*Training Methods; \*Vocational Education  
 IDENTIFIERS \*TAFE (Australia)

ABSTRACT

An exploratory investigation into training and learning in small businesses in Australia was conducted to identify issues surrounding training and learning and issues relating to the research methodology. Data were collected from a review of the literature, case studies of six small enterprises, and a review of two case studies conducted previously. Emphasis on learning was found to vary considerably between small businesses depending on the following: the small business's basis for competition and reliance on knowledge; whether its staff are permanent or casual; and who in the firm has the knowledge contributing to business success. A new approach to learning in small businesses was proposed that is based on a range of learning activities. At the individual employee level, the proposed approach includes discussions with product representatives, supplier-run seminars, and periods of working in other job areas. At the firm level, the proposed approach includes knowledge introduced by staff recruited from competitors or customers and new approaches learned from previous business allies. It was concluded that research into training and learning in the small business sector must look not only at learning within the firm but also at learning between firms and their operating environments. (Contains 33 references) (MN)

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# Training and Learning in Small Business

Issues for research

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# *Training and Learning in Small Business*

Issues for research

*Laurie Field*

*May 1997*

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UTS Research Centre for Vocational Education and Training

This project was assisted by a grant to  
the Research Centre for Vocational  
Education and Training by the Australian  
National Training Authority



ISBN 1 86365 409 7

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# Executive Summary

Small business is recognised as a vital part of the Australian economy. Indeed, more than half of all private sector employment is in small business. Its performance is recognised world-wide as being important for achieving national economic goals.

Despite this, a disproportionate amount of attention (in the form of funding, research efforts by universities and consultancies, advice and services) is paid to larger businesses. Typical of this is that Australian thinking about workplace training and learning has been greatly influenced by the management and organisational development literature, which has drawn attention to the importance of areas such as skills, knowledge, organisational learning and organisational competence for enterprise success and the vocational education and training (VET) literature, focused on policies and practices surrounding the delivery of structured training programs.

However, we have only limited knowledge about how the concepts they deal with apply in small business. There is an urgent need for grounded research in small business which draws out the particular issues that apply there. This report reviews our knowledge of learning and training in small business and points the way to research which can assist small business in Australia realise its potential.

## **A WIDELY VARYING SECTOR**

The emphasis on learning varies considerably between small businesses. In some, staff are expected to be familiar with systems and technology, and to keep up to date with a wide range of products across the firm's various departments. Often in such cases the main basis for competition includes customer service and this often involves extensive product knowledge. It is easy to understand the emphasis these enterprises place on knowledge sharing and continual learning.

In others, there is very little change in work practices, and no technological change at all. Price, location and fast service are seen as the keys to success. To keep costs low and work arrangements flexible, much of the work is done by casual employees and relatives working on a part-time basis. Casuals tend to be strictly confined to set tasks. In these firms, there is little encouragement of learning beyond doing one's basic job.

It is possible to make sense of the different emphases on learning by looking at such things as the basis for competition, reliance on knowledge, whether staff are permanent or casual, who (in the firm) has the knowledge which contributes to business success, and a range of other factors identified in the report. Some related issues which the report identifies include:

- employee's attitudes and control of cash flow are commonly viewed as much more significant than skills;
- small businesses assume that government schemes are an imposition, and this may well colour their attitude to VET-sector programs;
- a small business may offer no promotion opportunities, so there is little incentive to undertake formal training;
- a significant proportion of small business employees fall into one of the following categories: female; part-time; over 30. Female and part-time employees may have difficulty attending training programs (especially those conducted after hours) and older workers may have less need for training.

## **A FAILED MODEL**

Many studies have found that small business largely don't use the training the VET sector provides. To date, VET authorities have tended to respond to these by believing that their challenge is to repackage programs and modify delivery arrangements in an effort to increase demand. We suggest that future research should directly challenge this logic. Its weaknesses include:

- the belief that the concepts contained in small business courses—many drawn from big businesses—would improve small business viability;
- under-recognition of the amount of learning that occurs in many small businesses;
- the implication of a direct link between business demise and managerial skill;
- a failure to appreciate that in small business where there is little change and competition is based on low costs, there may be little scope to do things differently;
- the belief that if the delivery mode changed, demand for training by small business would significantly increase.

## **A NEW APPROACH**

In proposing that a new approach to learning in small businesses is warranted, this report illustrates the range of learning activities which may be glossed over if one adopts a narrow 'training delivery' approach. At the level of the individual employee, these include:

- discussions with product representatives;
- supplier-run seminars; and
- working in other job areas.

And, at the level of the firm, they include:

- knowledge introduced by staff recruited from competitors or from customers; and
- new approaches learnt from previous business allies.

Research into training and learning in the small business sector needs to look not only at learning within the firm, but also to examine learning between firms and their operating environment (customers, suppliers, business partners and allies, etc). For example, it cites firms where:

- technical knowledge resulted partly from close alliances built up with nearby universities;
- the principals had been involved in other concurrent business ventures from which they learnt a great deal that they could then apply in their main business;
- the enterprise relies heavily on one or two dominant customers, and the most important learning they are involved in is learning to satisfy these customers as they change and grow.

In place of the traditional approach, the focus in these examples is on how firms acquire the knowledge they need to achieve competitive advantage. Relationships with other firms and agencies are, then, critically important.

## **A POINT OF DEPARTURE**

This report forms the starting point for a program of research conducted by the UTS Research Centre for Vocational Education and Training (RCVET). The issues identified here and in other RCVET research are being pursued further in a number of studies which, it is hoped, will provide sound advice to small businesses on how to maximise their firm's learning and will also inform the policy debate on workplace learning and the role of VET systems and providers.

# Rationale and definitions

## **WHY FOCUS ON 'SMALL BUSINESS'?**

Small business is recognised as a vital part of the Australian economy. A lot of Australians work in small business. Indeed, more than half of all private sector employment is in small business (accounting for approximately three million people). The ABS has estimated that there were around 850,000 small private sector businesses in Australia in 1993-94, employing some 2.9 million people. Small business accounts for approximately 97 per cent of all private sector businesses, and 52 per cent of all private sector business employment (including self-employment). Its performance is recognised world-wide as being important for achieving national economic goals.

Despite this, a disproportionate amount of attention (in the form of funding, research efforts by universities and consultancies, advice and services) is paid to larger businesses. Research into small business is justified in order to redress this imbalance.

## **WHY RESEARCH 'TRAINING AND LEARNING IN SMALL BUSINESS'?**

Australian thinking about workplace training and learning has been greatly influenced by two bodies of literature:

- the management and organisational development literature, which is responsible for drawing attention to the importance of areas such as skills, knowledge, organisational learning and organisational competence for enterprise success; and
- the vocational education and training (VET) literature, which has been primarily concerned with policies and practices surrounding the delivery of structured training programs.

We have only limited knowledge about how the concepts dealt with in these literatures apply in small business. In the case of the management/organisational development literature, almost all of the examples cited are from large businesses. There is an urgent need for grounded research in small business that draws out the particular issues that apply there.

In recent years, there has been a great deal written about the concept of a learning organisation. According to the Karpin Committee on Leadership and Management Skills (1995), by the year 2010:

*'...the learning organisation will be the standard philosophy for many Australian enterprises and a major way they cope with change and turbulence.'*

A wide range of large Australian organisations, both public sector (Australian Taxation Office, Office of State Revenue, Brisbane City Council) and private (Lend Lease, Westpac, Carlton & United Breweries, Tubemakers) have made commitments to improving organisational learning. However, it would be useful to investigate the extent to which concepts and strategies being promoted in the literature of organisational learning apply to small businesses.

An increasingly popular view of organisations is that competitive advantage results from 'core competence' (Hamel & Prahalad, 1994). 'Core competence' refers to an organisation's unique mix of skills and knowledge, combined with the technology and



information systems necessary to exploit them. If core competence is a basic business resource, then learning is important because it is the process of accumulating core competence. If government and education sectors are to help small business, they need to understand this broader, more strategic form of learning better.

Ghobadian & Gallear (1996) have summarised the differences between small and large businesses (see Table 1, below).

Their distinctions raise some interesting issues. Despite the authors' claim, the list on the left is not so much a description of 'large' organisations as of 'large, traditional organisations in stable environments'. In reality, many large but non-traditional organisations in turbulent environments have tried hard in recent years to become more like the 'small' business description. The description of the culture of 'large, traditional organisations in stable environments' corresponds closely to what the Training Guarantee; Structural Efficiency Principle; the National Training Board; ANTA, etc have depicted as 'training'.

*Table 1 Differences between small & large enterprises (Ghobadian & Gallear, 1996)*

<i>Large</i>	<i>Small</i>
Mostly bureaucratic	Mostly organic
System dominated	People dominated
Fact-based decision-making more prevalent	Intuitive decision-making more prevalent
Training & development planned & large-scale	Training & development small & ad hoc
Specified training budget	No specified training budget
Formal evaluation, control & reporting	Informal evaluation, control & reporting

The concept of 'training' that is dominant in Australian policy and government-sponsored research may reveal more about traditional notions of organisations than about real training and learning across a range of organisations. In-depth study of training and learning in small business would help take these speculations further.

With regard to the VET literature, there is good evidence (discussed more fully later in Section 4) that very little of the learning that occurs in small business results from structured training. In most Australian VET research efforts either, training and learning are treated as synonymous, or there is an implication that for learning to be legitimate it has to be structured and delivered.

A policy framework for small business that resulted from a 1996 ANTA-run forum illustrates this emphasis on delivery. Here is an extract:

*Small business will be able to select a delivery method that caters for the learning needs of people in small business, such as small group discussions, workshops and personnel counselling, independent self-directed learning, experiential and action learning—which incorporates informal learning and self-delivery. (ANTA, 1996, Attachment 1, p. 2)*

The suggestion that all learning (even self-directed, experiential, action-oriented) has to be 'delivered' (even if to and by oneself) is clearly nonsense, yet this kind of thinking underpins a great deal of research and policy work by ANTA and other agencies. There is an urgent need to help modify concepts such as these that the VET sector tends to take for granted. Because most of the learning that occurs in small business is self-directed, experiential and action-oriented, it is an ideal place to explore these issues.

## PROJECT DESCRIPTION

UTS's Research Centre for Vocational Education and Training contracted Field Learning Pty Ltd to undertake an exploratory investigation into training and learning in small business. The project had two foci:

- issues surrounding training and learning; and
- issues relating to methodology.

Data was mainly drawn from a review of the literature, and from case study research.

**Literature review.** A wide range of material was collected and reviewed. This review sought insights about the nature of small business learning, not only by individual managers and employees, but by whole businesses. A summary of the most significant points, along with comments and observations can be found in Sections 2-4, below.

*Table 2 Classification of case study enterprises by skill type (Hendry, Arthur & Jones, 1995)*

<i>Skill/labour market</i>	<i>Characteristics</i>	<i>Our example</i>
<i>specialised skill</i>	all employees have high level technical skills	Removalists
<i>technical process</i>	two-tiered skill structure	Chemist [ElectronicAssembly]
<i>flexible service</i>	high-commitment employees, and a strong customer focus	Gym
<i>unskilled mass</i>	large proportion low skilled (inc. NESB); internal labour market	[Winery]
<i>professional market</i>	highly stratified, with little or no career path. Owner/managers have industry-recognised credentials	Dentist
<i>flexible casual</i>	core + high % casual employees	ServiceStation
<i>unstable labour market</i>	continual high turnover; job design to minimise skill requirements	Cafe

[ ] indicates derived from previous case study research

**Case studies.** Based on the literature review, a detailed interview protocol was developed. This consisted mainly of open-ended questions, and included questions about critical learning-incidents. To select case studies, a framework suggested by Hendry, Arthur & Jones (1995) was used (see Table 2, above). This took into account skill stratification within the firm, coupled with where the firm gets its skills and knowledge.

Six case studies were undertaken for this project. These were supplemented by two case studies drawn for earlier assignments. A report on each of these eight case studies is available from RCVET as a separate volume.

# WHAT IS "SMALL BUSINESS"?

## DEFINITIONS AND GENERAL SMALL BUSINESS ISSUES

Various definitions for small business have been suggested, and these generally relate to the business's number of employees. For example, ABS defines small businesses as:

- non-manufacturing industries employing less than 20 employees;
- manufacturing industries employing less than 100 employees.

A business has traditionally been regarded as 'small' if it has the following management or organisational characteristics:

- it is independently owned and operated;
- it is closely controlled by owners/managers who also contribute most, if not all, of the operating capital;
- the principal decision-making functions rest with the owners/managers.

(Based on the report of the House of Representatives Standing Committee on Industry, Science and Technology *Small Business in Australia—Challenges, Problems & Opportunities (1990)*)

[Note: An employment-size definition is not used for the agricultural sector because of difficulties in defining small agricultural businesses according to employment size. Agricultural businesses can have large-scale operations with relatively few permanent employees, often using large numbers of seasonal and itinerant workers to overcome short-term labour needs.]

Females make up a significant proportion of small business employees in many sectors, as indicated by the following figures [ABS]:

*Table 3 Gender composition of the Australian Workforce. (Source: ABS Cat. 1321.0, Table 1.3)*

	Small business ('000)	
	Male	Female
* Higher proportion female		
Mining	4.5	1.0
Manufacturing	267.4	106.4
Construction	119.1	29.8
Wholesale trade	114.1	59.8
Retail trade	150.9	145.3
* Accommodation, cafes and restaurants	47.5	66.6
Transport and storage	44.4	18.3
* Finance and insurance	18.5	21.8
* Property and business services	109.9	130.3
* Education	7.1	20.7
* Health and community services	34.4	97.9
* Cultural and recreational services	16.8	25.0
* Personal and other services	24.5	41.8
Total	960.8	766.0

When selecting small businesses to study, size relative to other companies in the same sector may also need to be taken into account. A firm may be 'small' (eg twenty employees) but may regard itself as 'big' because it is the largest within its sector. For example, Chemist is a small business, yet it is one of the biggest chemists in NSW, and has a strategic, planned approach to training quite similar to large firms in other industries.

According to Coopers & Lybrand (1994), most small businesses are:

- independent companies or partnerships (87%);
- family-owned (72%);
- reliant on full-time workers (86% of the small business workforce).

An important component of small business is the non-employing sector. During 1994-95 there were, on average, 428 000 non-employing businesses operating in Australia, representing 54 per cent of total non-agricultural small business. While these businesses, by definition, have no employees, there were an estimated 640,000 people involved either as sole proprietors or partners. This represented 24 per cent of the total, non-agricultural, private sector small-business workforce [ABS].

Construction has more non-employing businesses than any other industry. In 1994-95 an estimated 106,000 (25 per cent) of non-employing businesses were classified in the Construction industry (ABS Cat 1321.0, p. 8).

Some of the central learning issues for small businesses relate to survival, adaptation and growth over a period of time. For example:

- learning and knowledge transfer associated with an individual over time as (s)he moves from company to company;
- learning by an organisation as it passes through different stages of development—for example:
  - pre-start up;
  - at start-up;
  - micro-business (less than 5 employees);
  - business survivors (first 3 years; at or near break-even);
  - first stage business growth;
  - second stage growth;
- learning during take-overs or change in management.

## ‘NOT MUCH TRAINING’

### THE NATURE AND EXTENT OF TRAINING IN SMALL BUSINESS

A good deal is known about the nature and extent of training in small business. Whilst it needs to be acknowledged that some small businesses invest heavily in training, on average, there is significantly less training in small business than there is in larger organisations. Few small businesses have specific budget allocations for training, and many regard both the national training agenda and external training programs as irrelevant.

Conclusions like these have been produced in a number of Australian studies during the last decade, and there seems to be little point in future research revisiting this same ground.

*Some important relevant findings include:*

- Employees in small business get substantially less training than those in larger businesses, primarily because they typically receive none:

*Table 4 Amount of training by size of enterprise. (Source: ABS Cat. 1321.0, Table 5.10)*

No. of employees	1-19	≥ 100
Total \$/employee	\$85	\$208
Training hrs/ employee	4.1	5.5
Employers reporting training	18%	97.6%

These figures may reflect real differences between large and small businesses, but there are a number of alternative explanations as well—for example:

- small business managers either tend to answer ABS surveys superficially or don't bother reporting the training they do at all;
- small business managers have a restricted notion of 'training', and so they include less activities under this heading;
- small business managers are not as good as their large business counterparts at recording all their training costs.
- However, when businesses invest in training, small businesses invest substantially more:

*Table 5 Investment in training by size of enterprise. (Source: ABS Cat. 1321.0, Table 5.10)*

No. of employees	1-19	≥ 100
Total \$/employee	\$269	\$211
Training hrs/employee	13	6

Some possible explanations are:

- small businesses vary much more than large businesses in terms of reliance on training and skills;

- small businesses vary much more than large businesses in terms of reliance on accountants who are good at claiming lots of expenses under the 'training' heading.
- Training tends to be included much more in Enterprise Agreements in larger enterprises than small ones, according to Australian Centre for Industrial Relations Research and Teaching (ACIRRT) data (Callus, 1994). For example, based on a sample of 119 Federal, NSW and Queensland agreements:

*Table 6 Inclusion of training in enterprise agreements by size of enterprise*

No. of employees	1-19	≥ 20
% mentioning training	44%	69%

- Small firms are much less likely to have a specific training budget than large firms (Hendry et al, 1995).
- According to Callus (1994), based on case study and interview research, non-managerial employees in small business are disadvantaged in terms of skills recognition and access to structured training. (This especially applies to employees who are part-time and female.) While the common perception is that small business employees tend to be multiskilled, there is no evidence that they are adequately trained to undertake the range of jobs they do.
- Small business are largely ignorant of the importance and relevance of changes occurring nationally in training programs and systems (Callus, 1994).
- Several 'best practice' programs for small business are described by Better Business Centre (1996):
  - management consultants in Queensland are subsidised to work with small businesses and assist with business planning. The outcome is not just the plan itself, but knowledge transfer via mentoring and via client involvement in gathering data;
  - a self-paced, modularised certificate in Small Business Management (Victoria) makes use of a varied delivery modes (demonstrations, group discussion, projects, audio and video, computer assistance, individual projects and peer review) and locations (campus or community settings). Presenters are a mix of small business operators and technical specialists.
- According to ANTA (1995) and Better Business Centre (1996), where training is sought, small businesses prefer that:
  - it is in or associated with the business and its environment;
  - it is marketed via personal contacts or targeted networks;
  - it is timed to suit;
  - it is structured into short modules which are repeated regularly;
  - it uses self-paced or computer-based approaches where possible;
  - it is delivered by trainers who are sensitive to/specialise in the needs of small business;
  - it uses mentoring and some follow-up to ensure learning is applied;
  - it involves development of cohesive groups and self-supporting structures for clients.
- A wide-ranging survey of Australian small business found that the two preferred methods of learning are 'learn as you go' and 'learn from peers, other owners or managers'. Other approaches, about which there are mixed responses (some positive, some negative) are 'external courses', 'apprenticeships' and 'government schemes' (Coopers & Lybrand, 1994).

According to Coopers & Lybrand, the basis for judgement here seems to be the extent to which a method or program is:

- industry-specific;
  - relevant;
  - practical/hands on;
  - easy;
  - part of the job;
  - quick.
- In house training (especially on-the-job, but also formal) is valued much more highly than training provided by external agencies such as TAFE or industry associations (Coopers & Lybrand, 1994).
  - According to Coopers & Lybrand (1994), to better cater to the needs of small business, the VET sector needs to shift its orientation as follows:

*Table 7 Changing orientation to learning & training of businesses*

Conventional		Entrepreneurial
focus on content	⇒	focus on process
trainer as expert	⇒	participant as learner
emphasis on 'know what'	⇒	know 'how' and 'who'
received passively	⇒	participants generate content
pre-planned sessions	⇒	flexible & responsive
imposed objectives	⇒	objectives negotiated
mistakes seen as errors	⇒	mistakes as 'learning opportunities'
emphasis on theory	⇒	practical emphasis
focus on subject	⇒	focus on examples and problems
trainer provider orientation	⇒	recognition of independence & individual needs

- To become more palatable, externally-provided training would need to be more industry [and probably enterprise]-specific. However, no matter what the VET sector does, around one-third of small businesses say they are unlikely to use external training (Coopers & Lybrand, 1995).
- Some of the most valuable training initiatives in small business involve parallel programs for employees and managers (Better Business Centre, 1996).

### **WHY IS THERE SO LITTLE TRAINING IN SMALL BUSINESS?**

One could summarise the findings in the last section by saying that, clearly, small businesses are not engaging in large-scale use of structured training. This section examines some of the reasons for this reluctance to undertake externally provided, structured training.

#### **Evidence from the literature**

The main reason that training is not valued by small business managers is that it is viewed as 'irrelevant' or 'theoretical rather than practical'. Other (secondary) reasons for reluctance about training are that it is of no immediate benefit to the business, and that the skills needed are not the kind of thing that they believe you can teach (often because the primary requirement is attitudinal) (Coopers & Lybrand, 1994).

Very few small business managers (less than 10%) think of skills as being important to growth & success or as helping them deal with problems and issues. Factors such as



employee's attitudes, cash flow control, market conditions and economic conditions are perceived as much more important (Coopers & Lybrand, 1994).

Small business managers see compliance with government schemes such as superannuation (and previously, the Training Guarantee levy) as their biggest problem, more than twice as problematic as cash-flow and competitive issues (Coopers & Lybrand, 1994). This factor helps to account for some neutral or negative attitudes to structured, government-provided or regulated training.

If employees are likely to leave, owners/managers are understandably reluctant to invest in training (Coopers & Lybrand, 1994). This consideration is particularly important in businesses such as retailing where it is common for business to:

- be small;
- have no previous experience of training;
- have high turnover;
- be managed by people with little or no post-school formal training;
- be static in terms of operating environment (market, new products or services, etc).

Data on the extent of training depends, in part, on the concept of 'training'. In a North American study of human resource development (HRD) in small and medium-sized enterprises, Rowden (1995) points out how narrow the concept of HRD and training can be:

*'For people in these companies, HRD means a planned learning situation where participants sit in a classroom and are taught something. They simply do not view all the coaching, mentoring, OJT[on-the-job training], informal learning and development that they do as forms of HRD.'* (p 369)

According to Coopers & Lybrand (1994) and Yellow Pages (1994), small business managers value general attitudes like commitment and enthusiasm much more highly than 'skill'. Other lesser, but still important skill/attitudinal areas are:

- service skills;
- industry/business-specific skills;
- technical skills.

There is a common perception that such skills and attitudes cannot be 'trained'.

Based on UK research, Vickerstaff (1991) highlights the lack of training knowledge or skills in small business. Small businesses are:

- less likely to have qualified training staff or personnel specialists;
- less able to judge the worth of training programs on offer externally;
- less able to make their needs known to external providers;
- less able to provide comprehensive on-job training in-house;
- less likely to appreciate the breadth of concepts like workplace learning and organisational learning.

According to UK research (Abbott, 1994), employees in small businesses have similar views to employers about training not being necessary. Of the employees interviewed, 72% said they did not need any additional training, for reasons set out in Table 8.

*Table 8 Reasons for not requiring further training*

Already have the knowledge & training required	38%
Amount of training is sufficient for the job	29%
You can only learn through experience	13%
More training would be available if needed	10%
Don't want more training	4%



The low figures for average training in small business may reflect the fact that:

- the small business sector includes a considerable number of low-skill firms, especially in agriculture, manufacturing, construction, community services and recreation;
- small business may have little or no opportunities for in-house promotion, so the incentive to upskill is less (Baker & Wooden, 1995);
- the concept of training used in training studies reflects big business or bureaucratic concepts and assumptions. In contrast, the generally ad hoc, on-the-job, flexible approach to supporting learning found in small business may actually be its strength rather than weakness;
- small businesses are less likely to employ young people (eg 39% of small businesses have no employees ages less than 20; for larger business, the figure is 15%) (Callus, 1994). Older employees are more likely to already have reasonable skills;
- in some categories, many employees are part-time. For example in very small businesses (less than 5 employees) employees are much more likely to be part-time than in other business categories (Isaac et al, 1993);
- a large proportion of employees in small business are women. For a variety of reasons (family; unavailability at night; no-one to provide cover during the day), women in small business have difficulty attending structured training;
- in a high proportion of small businesses (perhaps higher than big business), a large proportion of the work is fairly routine. [Note: The extent and nature of routine procedures helps to gauge how reliant a business is on learning. According to Hendry et al, learning demands are highest when:
  - most of the work done is non-routine;
  - the routine procedures that do exist rapidly become outdated;
  - employees are expected to be multi-skilled].
- small business owners may have little interest in expanding their businesses, despite the government view that the economy would improve if all small businesses expanded and took on more trainees. For example:
  - according to Still (1994), many women small business owners are motivated more by orientation to social and personal considerations (for example, remaining independent) than by expansion;
  - in his British study of small IT firms, Ackroyd (1995) found they tended to 'grow' by replication rather than by increasing the size of each firm.

Other possible reasons why so little training is reported, however, include:

- small business managers tend to answer government surveys either superficially or not at all;
- small business managers are less likely to keep full records of training costs than their counterparts in larger enterprises;
- small businesses vary much more than larger businesses in their use of training and skills; or
- small businesses rely on accountants who vary more in their propensity to claim a wide range of expenses as "training-related".

### **More evidence from the case studies**

The case studies used in preparing this report also highlight a number of reasons why formal, structured training is not highly valued by managers of small businesses, including the following:

- employee's attitudes and control of cash flow are viewed as much more significant than skills (eg Gym);
- small businesses assume that government schemes are an imposition, and this may well colour their attitude to VET-sector programs (eg ElectronicAssembly);
- some small businesses compete on the basis of low cost and flexibility rather than quality and customer service, and for these firms, it may be preferable to mainly employ low-skilled casual workers (eg Cafe);
- a small business may offer no promotion opportunities, so there is little incentive to undertake formal training (eg Winery);
- a significant proportion of small business employees fall into one of the following categories: female; part-time; over 30. Female and part-time employees may have difficulty attending training programs (especially those conducted after hours) and older workers may have less need for training (eg ServiceStation).

Like other aspects of structured training within small business, these issues are well understood and do not warrant further investigation. As the following section argues, however, we feel that research should challenge the conclusion that if not much training is happening in small business (for the kinds of reasons outlined above) then there isn't much learning either.

# Learning in small business

While it is not often cited or recognised, the literature which already exists gives us a fairly comprehensive indication of the scope of learning which occurs in small enterprises. The following review and analysis, however, shows that significant issues remain only poorly understood.

## THE NATURE AND EXTENT OF LEARNING IN SMALL BUSINESS

Small businesses have both advantages and disadvantages over large businesses when it comes to supporting learning (adapted from Ghobadian & Gallear, 1996)

- Advantages:
  - managing director usually highly visible, and is therefore better placed to remind people of the benefits of a learning orientation;
  - learning projects and teams find it easier to make an impact and involve people;
  - because there are fewer specialists and fewer layers of staff, multi-skilling occurs more readily;
  - closer personal contacts create an environment where critical questioning and suggestions are likely to be heard.
- Disadvantages:
  - owners may have no formal training and no awareness of concepts such as organisational learning;
  - in a small business, each manager and employee may have to look after many different functions with little backup, so there is little time or mental space to facilitate learning;
  - small businesses tend to be dominated by short-term considerations;
  - there is little opportunity for learning pathways within the small firm (this can mean that small firms have difficulty retaining high calibre staff);
  - the time and costs to introduce systems that would support learning (eg goals; feedback; guidance) may be prohibitive in a small business;
  - small businesses may not have access to specialist knowledge about learning concepts and how to apply them.

Some types of small business seem to be very well designed for rapid knowledge acquisition, transfer and application. For example, in a British study, Ackroyd (1995) describes the common characteristics of the small, successful information technology firms he investigated:

- small working teams as basic operating unit (and a lot of movement between teams);
- lack of orthodox structure (each was to some extent a matrix structure);
- the organisational boundary was often indeterminate (movement of staff across organisational boundaries);

- informal affiliations and alliances (both outside and inside the company) were crucial;
- organisation strategy and design reflects staff competences and interests—absence of formal, separate managerial function;
- staff were multi-skilled knowledge workers, and formal qualifications were relatively unimportant;
- highly oriented towards customers;
- highly adaptable and mobile.

Many small firms periodically have to overcome periods of crisis (and hopefully learn in the process). Such crises may relate to:

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>■ sudden discontinuous market changes;</li> <li>■ loss of employees who have core technical knowledge;</li> <li>■ loss of dominant customers;</li> <li>■ new government policies and funding priorities;</li> <li>■ new competition by well-established larger companies;</li> </ul> | <ul style="list-style-type: none"> <li>■ sudden periods of rapid expansion;</li> <li>■ being taken over, or taking over new businesses;</li> <li>■ death of the owner;</li> <li>■ severe financial difficulties;</li> <li>■ sudden realisation of technology and systems being outdated.</li> </ul> |
|---|---|

Small firms which recover from crisis often do so by a change in management or by takeover. In both cases, the process can be thought of as a learning one, with new knowledge being the remedy for crisis. Crisis not only dispenses with old ways; it introduces new organisational competencies.

The emphasis on learning varies considerably between small businesses. Contrast the situations at two of the sites studied, Chemist and Cafe. At Chemist, staff are expected to be familiar with systems and technology, and to keep up to date with a wide range of products across the store's various departments. The main bases for competition at Chemist are customer service (which includes extensive product knowledge) and practicing a preventative health approach. As our detailed case study report shows, information—in the form of systematic feedback, reference data-bases, consultant briefings and customer records—is crucial for the business to achieve its aims. Given this context, it is easy to understand the emphasis placed on knowledge sharing and continual learning.

In contrast, at Cafe, there is very little change in work practices, and no technological change at all. Price, location and fast service are seen as the keys to success. To keep costs low and work arrangements flexible, much of the work is done by casual employees and relatives working on a part-time basis. Casuals tend to be strictly confined to set tasks. At Cafe, there is little encouragement of learning beyond doing one's basic job.

As well as illustrating the very different emphases on learning between the two sites, these examples illustrate that it is possible to make sense of the different emphasis on learning by looking at such things as basis for competition, reliance on knowledge, whether staff are permanent or casual, who (in the firm) has the knowledge which contributes to business success, and a range of other factors addressed in the case study protocols. In particular, at a number of the small businesses studied (eg Winery, Gym, Garage, Cafe), a small group of owner/managers or full-time employees have the core knowledge and skills, and then use limited-skill casual employees for much of the day-to-day service provision. At other businesses (eg Chemist, Dentist), business success required lower-level employees to have well-developed technical skills and knowledge, and this creates a greater need for learning.

The case studies and the literature also illustrates the range of learning activities which may be glossed over if one adopts a narrow 'training delivery' approach. At the level of the individual employee, these include:

- discussions with product representatives;
- participating in review meetings;
- supplier-run seminars;
- one-to-one coaching;
- working in other job areas;
- asking questions;
- doing innovative projects;
- experimenting;
- helping other staff learn to use computers;
- watching someone more experienced.

At the level of the firm, they include:

- knowledge introduced by staff recruited from competitors (ServiceStation) or from customers (Gym);
- new approaches learnt from previous business allies (Removalists);
- loss of employees who have core technical knowledge (Cafe);
- transfer of technical products and knowledge between subsidiaries (Gym);
- learning new work practices as a result of severe financial difficulties (ElectronicAssembly);
- learning during restructuring, take-overs or changes in management (Chemist).

#### **SMALL BUSINESS MANAGEMENT AND LEARNING**

Managers of small businesses tend to feel that learning from experience is the most appropriate and efficient way to learn. This makes them reluctant to send employees to off-site, structured training. The following comments express common sentiments:

*'I'm sceptical about the value of formal courses. It often comes down to personal attitude. We had a secretary with great certificates for example, but she sat there and chewed gum all day. A lot of what is valuable to us comes down to a person's ability to learn from experience and to transfer that to other situations.'*

*[Manager, Removalist]*

One reason that many small business owners may not value formal training is that approximately half have no post-school formal education, and about the same proportion had no small business management training when they started the business(Coopers & Lybrand, 1994). Even when they do undertake formal training, it tends to relate to technical areas rather than to new business approaches and concepts. Having learnt their skills in a particular way themselves, there can be little doubt that their attitude of 'I learnt what I needed on-the-job and from peers' has a major impact on their attitude to training of employees

The VET sector has tended to respond to findings like these with a logic that goes like this:

- small business is important;
- however, a significant proportion of small businesses founder;
- small business managers often have little formal training;
- better training (for managers and staff) would greatly impact on business success (that is, the 'need' for training is high);
- however, small business managers are reluctant to undertake or support training (that is, the 'demand' for training is low);
- the biggest challenge is to repackage programs and modify delivery arrangements in an effort to increase demand.

We suggest that future research should directly challenge this logic. Its weaknesses include:

- the belief that the concepts contained in small business courses—many of which are drawn from big businesses—would improve small business viability;
- under-recognition of the amount of learning that occurs in many small businesses;
- an assumption that all small businesses are self-contained entities in which success means sustained growth;
- the implication of a direct link between business demise and managerial skill;
- a failure to appreciate that in those small business where there is little change and where competition is based on low costs (eg Cafe, ServiceStation), there may be little scope to manage things differently;
- the belief that if the delivery mode changed, demand for training by small business would significantly increase;
- under-emphasis on the possibility that there may be a variety of other ways in which public sector agencies can facilitate learning aside from 'structured training' (eg the Executive Development Program run by AusIndustry, involving a six-month period of one-on-one mentoring and networking between business owner/managers).

Five skill/attitudinal areas are seen as crucial for managers (Coopers & Lybrand, 1994):

- adaptability;
- financial skills;
- people management skills;
- interpersonal/communication skills;
- business planning skills.

As managers move between organisations, they take their knowledge with them. Such movements are an important source of organisational learning.

In the small and medium-sized enterprises (SMEs) studied by Hendry et al (1995), management learning was typically ad hoc. Management learning was consistent with the philosophy of 'self-made'. Where formal management development had occurred, it was seen as remedial and geared to keeping up to date in technical areas, rather than preparation for fundamentally different approaches and concepts.

In a comparison between perceptions of supervisors in small and large companies (Moates & Kulonda, 1990), on almost every variable relating to relationships with managers and employees and to work-related problems, supervisors in small companies felt better off. One possible implication—managers and supervisors in larger Australian companies undertake more training because they face more complex management issues and therefore they need more skills to handle them.

### **LEARNING FROM NETWORKS**

Research into training and learning within the small business sector needs to look not only at learning within the firm and cooperative arrangements between the VET sector and firm, but also to examine learning between firms and their operating environment (which includes customers, suppliers, business partners and allies, other members of industry associations, and subcontractors). The case studies illustrate the importance of this kind of learning:

- At Chemist and Dentist, there is considerable learning from supplier representatives;



- Removalist learnt the whole area of disassembly from a firm which had previously specialised in this area;
- Technical knowledge at Gym resulted partly from close alliances built up with the climbing clubs at two universities;
- Much of the knowledge that contributes to Chemist's success was derived from merging two separate, pre-existing pharmacies;
- The principals at Dentist had been involved in other concurrent business ventures—setting up other dental surgeries, importing dental products—from which they learnt a great deal that they could then apply in their main business;
- The owner/manager at ServiceStation had previously been a trainer and business adviser with one of the oil companies, and from this position he had learnt about best practice in the industry.

The focus of these examples is important. In place of the traditional VET-sector research focus—namely, 'How can we tailor our programs and services to meet the needs of individual employees and managers'—the focus in these examples is on how firms acquire the knowledge they need to achieve competitive advantage. Relationships with other firms and agencies are increasingly important for a variety of reasons:

- a significant proportion of small businesses rely heavily on one or two dominant customers, and the most important learning these businesses are involved in is learning to satisfy these customers as they change and grow;
- for many small businesses, the primary source of learning is individuals or other small businesses with particular technical expertise (eg accounting; computer advice);
- trends towards outsourcing, just-in-time manufacture and close strategic alliances mean that increasingly, large firms have a stake in the knowledge and learning of small subsidiary suppliers and contractors;
- in some industries (eg pharmaceuticals), product marketing and education are closely intertwined, and suppliers invest heavily in the learning of staff in retail outlets.

Hendry et al (1995), distinguish between networks and networking. Networking is a skill that some managers and employees are better at than others. The network is the realisation of that skill. Both networks and networking are a core part of the capital of the small business.

Family and friends play an important part in the social networks of many small businesses, but this can greatly limit learning. In many businesses, it is important to move beyond these immediate contacts and establish sources of independent information and advice—for example, bank managers, accountants, consultants, industry groups. (Szarka, 1990).

According to Callus (1994), accountants are the single most influential source of information and ideas for small business. One implication is that training and educational decisions and perceptions may be greatly influenced by financial criteria.

A recent British Study (Cambridge SBRC, 1992) highlights the dependence of small firms on limited numbers of customers. In more than one-third of cases, a single customer accounted for at least 25% of business; the smaller the firm, the greater the dependence. Dependency relationships such as these can have considerable learning potential. By securing substantial work with a leading company, the small business is able to expand both its skill base and its technology base, and to develop its systems, networks, products and services in a highly focussed way. In addition, association with a high profile client typically results in a higher profile for the small business, and new clients as a result.

Within business networks, there is a lot of information available. However, it can be difficult to locate what one is looking for. In terms of the VET sector, this is a particular

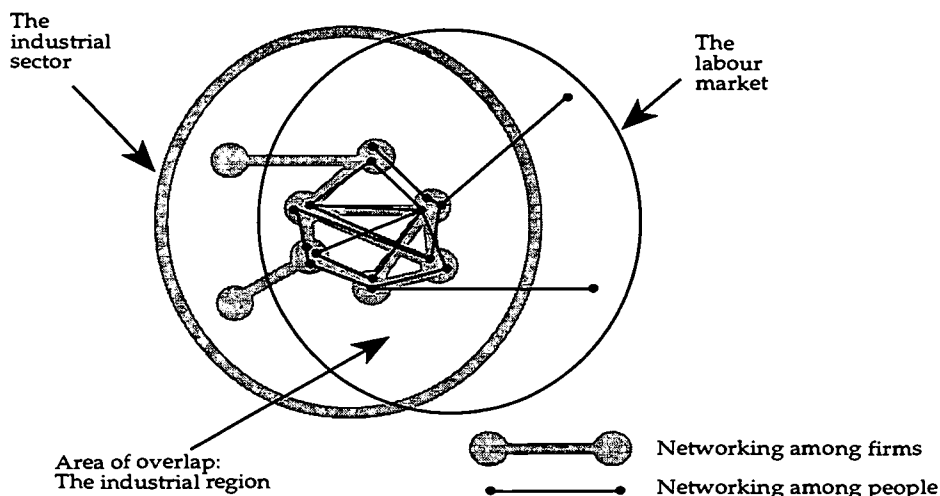
problem. Small businesses are often not represented on VET committees and are not part of informal training networks. Information gaps include the nature, composition, activities and funding assistance available from VET sector, ITABs, etc. Potential (underutilised) information distribution points include the mass media, secondary schools, tax offices, professional advisers such as accountants.

In his study of skill formation in Australian high-tech SMEs (small-medium sized enterprises), Curtin (1995) found signs of emerging networks involving learning from cooperative research centres, universities, CSIRO and large European technical firms.

Networks have two primary benefits for the small business. Firstly, they enable groups of small firms to bring together physical resources (equipment, funds, infrastructure) to satisfy contract requirements. Secondly, they are a source of small business knowledge and learning. Hendry et al (1995) emphasise learning in relation to two different (but overlapping) networks (the following refers to BHP in Newcastle to illustrate the concepts):

- the industrial sector [eg, for BHP this would include metals, engineering and processing knowledge and skills];
- the labour market [eg, for BHP, local employees with experience in operating and trades jobs, including particular ethnic communities].

This notion is well captured in the following figure drawn from Hendry et al (1995, Fig 8.3, p. 221)



*Figure 1 Relationship between the industrial sector and the labour market*

In some business sectors or regions, either because there is a single large employer (eg BHP in Newcastle) or a cluster of small firms (eg advertising firms in North Sydney), the supply of particular types of skills increases greatly. In situations where there is neither large employer nor small-firm cluster, small businesses may experience skills shortages, especially if the skills they require are highly specialised.

As Borch and Arthur (1995) highlight, an important issue in small business networks relates to confidentiality and trust—in particular, how much should each network member disclose of what they are doing? The implication is that research into learning across networks needs to be thorough enough to explore these issues.



## ISSUES FOR RESEARCH

This report has emphasised that the small business sector is characterised by diversity and, in the main, is more likely to be responsive to arrangements which assist its capacity to learn rather than those which focus on delivering structured training. The implications of these for further research in this sector are many but we highlight here those which are most critical:

### **a) Understand the influence of enterprise context on learning.**

We know that the emphasis on learning varies widely across small businesses and that it appears possible to make sense of these variations by considering significant structural and contextual features of the businesses. Thus key issues become those of whether and why knowledge or skill is valued, how these are utilised within the firm and how learning is transferred between individuals and systems both within and external to the enterprise. These factors need to be related to the operational context and focus of the firm—its competitive environment, the nature of its products, services, etc.

Our understanding that approaches to learning are greatly dependent on the detailed context of the firm's operating environment also means that any study which seeks to produce broadly generalisable answers will need to ensure that it draws enterprises from across strata which vary by breadth, industry, regional cluster of business allies and that includes enterprises which are partnerships/common buying groups/franchises.

### **b) Understand learning from and in networks**

A core feature of the particular context of many small businesses is their involvement in inter-organisational networks. This suggests that research should address questions such as 'from where does the firm get the knowledge that contributes to its success?'. Such research should understand the wide range of organisations and individuals with whom the organisation interacts—customers, suppliers, industry associations, subcontractors, etc.

### **c) Understand the nature of organisational learning**

Research should also consider small businesses at a particular point in time (which leads on to an exploration of the nature of change and development within the business, and the role of organisational learning and employee development in this process). This would include examination of learning and knowledge transfer associated with an individual over time as (s)he moves from company to company; and learning by an organisation as it passes through different stages of development, from pre-start up to maturity.

## REFERENCES & BIBLIOGRAPHY

- Abbott, B. (1994). Training strategies in small service sector firms: Employer and employee perceptions. *Human Resource Management Journal*, 4 (2), pp 70-87.
- ACIRRT (1994). *The training guarantee and small business: An evaluation of the impact of the legislation on training practices*. Sydney: University of Sydney.
- Ackroyd, S. (1995). On the structure and dynamics of some small, UK-based information technology firms. *Journal of Management*, 32 (2), pp 141-161.
- Anon (1996). *Strategies to improve skills acquisition and skills development within small business*. Brisbane: ANTA.
- Anon. (1995). *National small business forum on training issues: Background paper*. Brisbane: ANTA.
- Baker, M. and Wooden, M. (1995). *Small and medium sized enterprises and vocational education and training*. Adelaide: NCVER.
- Better Business Centre (1996). *Small business training programs: Displaying best practice principles*. Brisbane: ANTA.
- Borch, O. and Arthur, M. (1995). Strategic networks among small firms: Implications for strategy research methodology. *Journal of Management Studies*, 32 (4), pp 419-441.
- Callus, R. (1994). Research priorities for small business. In *Research priorities in vocational education & training—A discussion*. Brisbane: Australian National Training Authority. [Seminar proceedings, 20-22 April 1994]
- Cambridge Small Business Research Centre (1992). *The state of British enterprise*. Cambridge: University of Cambridge.
- Coopers & Lybrand (1994). *Training practices and preferences of small business in Australia: A report for vocational education and training providers*. [Report commissioned by ANTA]
- Coopers & Lybrand (1995). Small business: A review of training evaluation and effectiveness. In Industry Task Force on Leadership and Management Skills, *Enterprising Nation* (Research Report Vol 2). Canberra: AGPS.
- Curtain, R. (1995). *Skill formation in small, leading-edge enterprises*. Sydney: Dusseldorp Skills Forum
- Duberley, J. and Walley, P. (1995). Assessing the adoption of HRM by small and medium-sized manufacturing organisations. *The International Journal of Human Resource Management*, 6 (4), pp 891-909.
- Employment and Skills Formation Council (1994). *The shape of things to come: Small business employment and skills*. Canberra: AGPS.
- Field, L. & Ford, B. (1995). *Managing organisational learning: From rhetoric to reality*. Melbourne: Longman Australia.
- Ghobadian, A. and Gallear, D. (1996). Total quality management in SMEs. *Omega: The International Journal of Management Science*, 24 (1), pp 83—106.
- Goddard, D. & Ferguson, K. (1996). *Small business owners, their employment practices and key competencies*. Perth: University of Western Australia. [Report of a study conducted for the Department of Employment, Education & Training and Business in the Community]
- Hamel, G. & Prahalad, C. (1994). *Competing for the future*. Boston, Mass: Harvard Business School Press.

- Harrison, B. (1994). The small firms myth. *California Management Review*, 36 (3), pp 142-158.
- Hendry, C., Arthur, M. and Jones, A. (1995). *Strategy through people: Adaptation and learning in the small-medium enterprise*. London: Routledge
- Hendry, C., Arthur, M., Jones, A. and Pettigrew, A. (1991). *Human resource development in small to medium sized enterprises*. Warwick Business School [Research Paper 88]
- House of Representatives Standing Committee on Industry, Science & Technology. (1991). *Small business in Australia—Challenges, problems & opportunities*. Canberra: AGPS.
- Isaac, J et al (1993). *A survey of small business and industrial relations*. Canberra: Department of Industrial Relations.
- Koike, K. (1983). The formation of worker skill in small Japanese firms. *Japanese Economic Studies*, 11 (4), pp 3-57.
- Limerick, D. & Cunningham, B. (1993). *Managing the new organisation: A blueprint for networks and strategic alliances*. Sydney: Business & Professional Publishing.
- Moates, W. & Kulonda, D. (1990). An examination of differences between supervisors in large and small companies. *Journal of Small Business Management*, 28 (3).
- Rowden, R. (1995). The role of human resource development in successful small to mid-sized manufacturing businesses. *Human Resource Development Quarterly*, 6 (4), pp. 355-373.
- Sefton, R., Waterhouse, P. & Cooney, R. (1995). *Workplace learning and change: The workplace as a learning environment*. Melbourne: Automotive Training Australia.
- Stahl, T., Nyhan, B. and D'Aloja, P. (1993). *The learning organisation: A vision for human resource development*. Brussels: Eurotecnet. [Chapter 6: Small and medium enterprises and the learning organisation model]
- Still, L. (1994). Women in small business. In *Research priorities in Vocational Education and Training: A discussion*. Brisbane: ANTA.
- Thompson, M. (1992). *Key competencies in small business*. Adelaide: NCVER.
- Vickerstaff, S. (1991). The training needs of small firms. *Human Resource Management Journal*, 2 (3), pp. 1-15.

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