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Education and training that meets
the needs of small business:
A systematic review of research

Susan Dawe

Nhi Nguyen

National Centre for
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research

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Education and training that meets the needs of small business

A systematic review of research

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Publisher's note

Additional information relating to this research is available in the following support documents: *Education and training that meets the needs of small business: Support document—Summaries of included studies* and *Education and training that meets the needs of small business: Support document—List of 198 studies with abstracts and reasons for exclusion*. They can be accessed from NCVER's website <http://www.ncver.edu.au/publications/1737.html>.

To find other material of interest, search VOCED (the UNESCO/NCVER international database <http://www.voced.edu.au>) using the following keywords: small business; training; skill development; workforce development; small firms; small enterprises; SME.

Foreword

This research was undertaken by the National Centre for Vocational Education Research (NCVER) and funded by the Department of Education, Science and Training on behalf of the Australian Government and state and territory governments.

Small businesses account for the great majority of businesses and half the private sector employment, but only one-third provides structured training for its employees. Small business employers tend to be less satisfied with all types of recognised vocational qualifications. With this as the background, this systematic review canvassed existing research over the last ten years in order to find clear evidence of intervention strategies that meet small business needs in relation to the provision of information, skills and knowledge in the training arena.

This study will be of particular interest to policy-makers with an interest in small business, training providers and other business service organisations interested in supporting small business. While research always leaves some questions unanswered, this review provides clear directions on what works for small business.

The systematic review process is a collaborative team effort and the consultants—Richard Elvins, Jane Figgis, Sarah Hayman and Peter Pfister—undertook the majority of the reviews for this report. Susan Dawe and Nhi Nguyen assisted with the reviews and also put this report together.

Tom Karmel
Managing Director, NCVER

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Key messages

Through a systematic review of existing research, this study set out to find evidence to answer the following question: 'What intervention strategies achieve participation of small business managers and employees in education and training that meets the needs of small business?'. This topic was of interest because small businesses employ around 3.6 million people in Australia, but two-thirds of small businesses do not provide structured training for their employees.

✧ Strategies that work for small business are clearly focused on business need rather than driven by government agendas and funding.

✧ Lowering the costs of formal training is useful in engaging some small businesses, but financial incentives alone are not sufficient to meet small business needs. Small business will pay for education and training if they see the value in it and it is in line with their interests.

✧ Strategies which fit with the way small business learns are clearly more successful than direct or formal training. Small business learns 'through doing', with the focus on current or real issues in the workplace, and through social networks—learning from other business people.

✧ Successful strategies are business mentoring, networking, and collaborative or group learning with other businesses through clusters, alliances or action learning. Other effective strategies include diagnostic services such as training needs analysis, and benchmarking processes against other organisations. Programs which employ a number of these work better than those relying on a single approach.

✧ Strategies that meet the needs of the diverse range of small businesses demonstrate three essential elements. These are:
  ◆ a clear focus on business-specific needs
  ◆ a personal approach through a recognised local facilitator or business service organisation that is able to reach small business operators who may not be positive about training
  ◆ flexible provision which carefully individualises training information, content and delivery to the needs of each small business.

✧ Ten factors which contribute to strategies that work for small business are:
  ◆ providing opportunities to share skills, knowledge and experience with other business people
  ◆ linking training to business performance—increased profit, growth or survival
  ◆ linking training to specific stages in the business cycle (that is start-up, crisis and/or survival, growth and/or expansion and export and/or internationalisation)
  ◆ contacting small business managers personally to analyse their business needs
  ◆ providing ongoing business-specific support through a business service organisation
  ◆ minimising time spent away from the workplace
  ◆ integrating formal training and learning with informal learning processes in the workplace
  ◆ lowering costs of training by collaborating with other businesses or through financial incentives, such as a government subsidy or 'interest free' loans
  ◆ ensuring that facilitators and trainers have the appropriate networks and experience to enable them to be trusted and respected by all business participants, especially in the case of Indigenous Australian small business operators
  ◆ planning the strategy with small businesses and business service organisations.

Executive summary

From the last ten years of research into small business and education and training, we hoped to find clear evidence of strategies that engage small business in education and training activities that meet their business needs. The question posed by this systematic review was therefore: *What intervention strategies achieve the participation of small business managers and their employees in education and training that meets the needs of small business?*

We were interested in this topic because the Australian Bureau of Statistics (ABS) estimates that at least 97% of all non-agricultural private businesses in Australia have fewer than 20 employees and these businesses employ around 3.6 million people. Two-thirds of small businesses do not provide structured training for their employees.

The ABS definition of small business, those having fewer than 20 employees (except for agricultural businesses), was used. However, research studies which used different definitions of small business were also included in the literature search.

Starting with over 2500 references, we ended up with 20 research studies for which in-depth reviews were conducted. Of these 20 relevant studies, 11 were found to be of sufficiently high quality to 'answer' the review question, while the other nine studies were considered to provide supporting evidence.

The findings—what works for small business

There is clear evidence that, in the education and training arena, strategies that work for small business are clearly focused on business need rather than driven by government agendas and funding. Although government funding for skills development may be directed towards lowering the costs of formal training for small business, financial incentives alone are not sufficient to meet small business needs. Many small business managers do not see a relationship between training and their business needs.

Financial incentives or subsidies are clearly useful in engaging some businesses who may otherwise not pay for training. However, there is evidence that small business managers are willing to pay for education and training for themselves and their employees, if they see the value in it and it is in line with their interests or meets their needs.

Strategies which fit with the way small business learns are clearly more successful than direct or formal training. Previous literature has shown that small business managers and employees 'learn through doing' and much of their learning is focused on current or real issues contextually embedded in their environment. Two other important aspects are learning from other business people through social networks and through critical reflection of their assumptions, knowledge and experiences—their own and those of business colleagues.

Small business training programs which build on business-to-business interactions are most successful. They need to reach those managers who do not see the value of education and training to their business needs. Successful strategies for engaging businesses in education and training activities included business mentoring, networking, and collaborative or group learning with other businesses through clusters, alliances or action learning. Other effective strategies

were diagnostic services such as training needs analysis, and benchmarking processes against other organisations. Programs which employ a number of these strategies work better than those relying on a single approach.

Other strategies which have been shown to meet small business needs include the provision of administrative support (such as group training organisations for apprentices) and integrated support services through a 'one-stop shop' (such as business enterprise centre, industry or professional organisation or internet portals). Ongoing business-specific support may also include contextualised direct training provided by equipment and computer software suppliers (vendors), and that given to franchisees.

The features of successful strategies

Strategies that meet the needs of the diverse range of small businesses demonstrate three essential elements:

✧ a clear focus on business-specific needs

✧ a personal approach through a recognised local facilitator or business service organisation that is able to reach small business operators who may not be positive about training

✧ flexible provision which carefully individualises training information, content and delivery to the needs of each small business.

Ten factors which contribute to strategies that work for small business are:

✧ providing opportunities to share skills, knowledge and experience with other business people

✧ linking training to business performance—increased profit, growth or survival

✧ linking training to specific stages in the business cycle (that is start-up, crisis and/or survival, growth and/or expansion and export and/or internationalisation)

✧ contacting small business managers personally to analyse their business needs

✧ providing ongoing business-specific support through a business service organisation or training adviser

✧ minimising time spent away from the workplace

✧ integrating formal training and learning with informal learning processes in the workplace

✧ lowering costs of training by collaboration with other businesses or through financial incentives, such as a government subsidy or 'interest free' loans

✧ ensuring that facilitators and trainers have the appropriate networks and experience to enable them to be trusted and respected by all business participants, especially by Indigenous Australian small business operators

✧ planning the strategy, and its implementation, with small businesses and business service organisations.

Final comments

This review found only a small number of evaluation studies of mostly government-funded programs. However, these studies normally did not include the impact, particularly the long-term impact, of the strategies used. Undertaking long-term evaluations or impact studies would be beneficial for identifying which strategies are more effective in embedding formal training in small business planning and integrating formal learning with informal learning processes.

Through the review, we were also able to identify some gaps in our knowledge. Notable is the lack of research on training provided by vendors or that given to franchisees. Other potential research areas are the specific training needs of family businesses, owner–operators, or micro-businesses with fewer than five employees.

The core studies

Five Australian studies and six from the United Kingdom provide sound evidence to answer the review question. The following are the 11 evaluation studies:

1999: *Big pictures from the small end of town: 1998 Small Business Professional Development Programme evaluation report* (Kearney, P), Tasmanian Office of Vocational Education and Training for the Australian Government.

1999: *Business mentors: Supporting small business in Tasmania and on the Central Coast of NSW*, Dusseldorp Skills Forum, New South Wales, Australia.

2000: *Size matters: National summative evaluation report of the Small Business Professional Development Best Practice Programme 1996–2000* (Kearney, P), Tasmanian Office of Vocational Education and Training for the Australian Government.

2002: *Small Business Smart Business Get Smart—Get into training: Final report and evaluation* (Dufty, P), Western Australian Department of Education and Training with support of the Small Business Development Corporation, Australia.

2004: *Small Business Smart Business: Final report* (Walker, B & Webster, B), Small & Medium Enterprise Research Centre of Edith Cowan University for the Western Australian Department of Education and Training, Australia.

1997: *TECs and small firms training: Lessons from Skills for Small Businesses* (GHK Economics & Management), Research report 27, Department for Education and Employment, United Kingdom.

1999: *Evaluation of the Small Firms Training Loans Scheme* (Maton, K), United Kingdom Research Partnership Ltd, Research report 97, Department for Education and Employment, United Kingdom.

2002: 'Engaging SME managers and employees in training: Lessons from an evaluation of the ESF Objective 4 programme in Great Britain' (Devins, D & Johnson, S) in *Education and Training*, vol.44, issue 8/9 pp.370–7, London, United Kingdom.

2003: *Evaluation of the pilot Small Firm Development Account* (Hirst, A, Lefaucheux, M & Rinne, S) by Cambridge Policy Consultants, Research report 466, Department for Education and Skills, United Kingdom.

2005: *Evaluation of the Pilot Small Firm Development Account Year 2* (Hirst, A, Lefaucheux, M & Rinne, S), by Cambridge Policy Consultants, Research report 619, Department for Education and Skills, United Kingdom.

2005: *Talking the right language: Can further education offer support for business innovation? Feasibility study report* (Hughes, M & Stanton, G) by Learning and Skills Development Agency, United Kingdom.

Supporting evidence

Five Australian and four European research studies provide supporting evidence through specific case studies. These case studies emphasise the strategies used by small business to learn new skills and highlight the factors which are required in planning, promotion and implementation of successful strategies. The following are the nine research studies:

1996: *The Enterprise Training Mentor Program: An effective strategy for a mentoring program for on-the-job trainers in smaller enterprises in the Geelong region and a proposal for expansion* (Gordon Consulting), Rohm and Haas Vocational Education and Training Research Unit, Gordon Institute of TAFE, Geelong, Australia.

1998: *Working and learning in micro-enterprises in the printing industry: A comparative research study into the relationship between technological and organisational developments and training activities in micro-enterprises in the printing industry in four European countries: Synthesis report* (Van den Tillaart, H, van den Berg, S & Warmerdam, J), CEDEFOP, Thessaloniki, Europe.

1999: *Women in Small Business Mentoring Program* (Holgate, J), Professional and Career Development Unit, Western Australian Department of Training, Australia.

2000: *Entrepreneurial training for growth of small and medium-sized enterprises: Lessons from Central and Eastern Europe: Report*, by European Training Foundation, Office for Official Publications of the European Communities, Luxembourg.

2000: *Our business, our way: Indigenous perspectives on small business learning* (Research Australasia and ResolveNorth), Tasmanian Office of Vocational Education, Australia.

2001: *What convinces enterprises to value training and learning and what does not?* (Figgis, J, Alderson, A, Blackwell, A, Butorac, A, Mitchell, K & Zubrick, A), NCVER, Australia.

2002: *Working towards skills: Perspectives in workforce development: Research report* (Hughes, M, Keddie, V, Webb, P & Corney, M), Learning and Skills Development Agency, United Kingdom.

2003: *How small business learnt about the goods and services tax: Lessons for vocational education and training* (Billett, S, Ehrich, L & Hernon-Tinning, B), NCVER, Australia.

2005: *Employers' collaboration to raise skills in supply chains and clusters* (Confederation of British Industry), CBI, United Kingdom.

Introduction

Small business and training

The Australian Bureau of Statistics (ABS), which defines small business as employing fewer than 20 employees (except in agriculture), estimates that there were 1 233 200 private-sector small businesses operating in Australia during 2000–01. They accounted for 97% of all non-agricultural private businesses in Australia and around 15% of gross domestic product (Department of Industry, Tourism and Resources 2004). These small businesses employed almost 3.6 million people, which represented 49% of all non-agricultural private sector employment (ABS 2002). A 2001–02 survey of employers found that just one-third of small businesses in Australia provided structured training for their employees compared with 70% of medium (20 to 199 employees) and 98% of large-sized enterprises, respectively (ABS 2003).

Small businesses account for the great majority of businesses, half the private-sector employment and most of the net new jobs in Australia (Department of Industry, Tourism and Resources 2006), but only one-third provides structured training for their employees. It is estimated that, after five years, 27% of new small businesses would have ceased (Rann 2006). Dun & Bradstreet (1994) noted that the lack of management expertise is the most important factor in the failure of small businesses. Kearns (2002) argues that training is a vital ingredient in building entrepreneurship and fostering innovation, and the provision of ongoing training and learning is a powerful incentive for attracting employees to small businesses. Therefore, training is important at all stages of the business cycle: start-up, crisis and/or survival, growth and/or expansion and export and/or internationalisation.

Training can take place through the vocational education and training (VET) system and can include the use of apprenticeships and traineeships, as well as other forms of nationally recognised (accredited) training. Training also includes other formal structured training not recognised through the VET system (unaccredited training) and informal training, such as equipment demonstrations and self-directed study. Structured or formal training activities follow a predetermined plan, are instructor-led, and are monitored and recorded by a training provider (Dawe 2003). In contrast to formal training, informal training activities are instigated by the individual (for example, self-training through reading manuals) or occur as the need arises or depending on the circumstances (for example, vendor sessions or mentoring). There are many different types of providers employers can use to fulfil the training needs of their staff. Employers can also provide training themselves.

A recent survey of employers' use and views of the VET system in Australia confirms that small businesses are consistently less engaged with the VET system than larger employers (NCVER 2006). It also found that 14% of small businesses were not involved in any type of training in the previous 12 months, including apprenticeships or traineeships, nationally recognised training and unaccredited and informal training. The importance of training did not vary by size of employer, but satisfaction did—small businesses were less satisfied with all types of recognised vocational qualifications.

However, informal learning, on-the-job learning and the use of business networks satisfy the needs of many small businesses. Not all identified business needs require a training solution: in many cases timely technical and financial advice will suffice. Not all small businesses employ people: many are sole operators. Not all small businesses want to grow: some people go into small business for lifestyle and work-style reasons, and growing bigger is at odds with these reasons.

The systematic review

The aim of a systematic review of existing research is to develop a concise summary of the best available evidence that addresses a clearly defined question in a particular area of interest. A systematic review uses explicit and rigorous methods to identify, critically appraise and synthesise relevant research (both published and unpublished) around a specific research question (Thomson et al. 2005).

One of the 2004 national research priorities for the VET sector was the question: *How can good practice in engaging small and medium business in VET be replicated?* From the last ten years of research, we hoped to find clear evidence of strategies that meet small business needs, particularly in relation to the provision of information, skills and knowledge in the training arena. A decade had passed since the National Centre for Vocational Education Research's (NCVER) last overview of research on small business and VET (Gibb, J 1997).

Kusek and Rist (2004) define evaluation as:

> … an assessment, as systematic and objective as possible, of a planned, ongoing, or completed intervention. The aim is to determine the relevance of objectives, efficiency, effectiveness, impact and sustainability so as to incorporate lessons learned into the decision-making process.   (Kusek & Rist 2004, p.15)

In our review we hoped to find evaluations of intervention strategies that included 'more than just the satisfaction of participants' (OECD 2002a). We were interested in examining assessments by participants through an exit or follow-up survey. We hoped that the evaluation studies would address:

> … 'why' questions, that is, what caused the changes being monitored; 'how' questions, or what was the sequence or process that led to successful (or unsuccessful) outcomes; and 'compliance and accountability' questions, that is, did the promised activities actually take place as planned?   (Kusek & Rist 2004, p.15)

Framework development

From the initial topic of 'small business and VET", the project steering group (whose members are listed in appendix 1) defines the review question by focusing on three key components: the *population,* the *intervention,* and the *outcome* of interest. This report addresses the agreed review question:

> What intervention strategies achieve the participation of small business managers and their employees in education and training that meets the needs of small business?

The steering group discussed the definitions of key words which are specified in the framework (see appendix 2) and included both informal and formal education and training. For this review, there are two dimensions to the outcome sought: 'participation in education and training' and 'meets the needs of small business'. It was the intention of this review to find evidence for those strategies that enable both dimensions—*participation* and *satisfaction* to be met (see appendix 2).

The population of interest is small businesses, including owners, managers and employees (where the total number of employees is fewer than 20 in Australia). Since the issue of engaging small business in training to improve the skills of the workforce was not unique to Australia, the search also included studies from other countries which use different definitions of small business.

A systematic review of research requires the development of a detailed framework covering the review question, definition of key words, scope of the review, search methodology and criteria for selecting the studies. It also includes the criteria used for appraising the quality of the research studies to be included. A broader stakeholder group (see consultation group in appendix 1) provided feedback on the framework and added to the list of search sites. The final framework

(provided in appendix 2) was agreed by the steering group in December 2005, and the literature search was undertaken in January 2006.

The selection of studies

From the initial 2688 references based on key words, this number was reduced to 198 studies (see figure 1) by strictly applying the definitions for population, intervention and outcome to the abstracts. Two reviewers were then able to reduce this to 73 studies. From the 73 documents, 20 studies were selected independently by two reviewers to be included in the *A list* (see table 1). The remaining 53 documents were labelled *B list*. Details of the 198 studies, including abstracts and reasons for their exclusion from the A list, are available in *Education and training that meets the needs of small business: Support document—List of 198 studies with abstracts and reasons for exclusion* at <http://www.ncver.edu.au.publications/1737.html>.

Figure 1   Summary of selection process for studies to be included for in-depth review
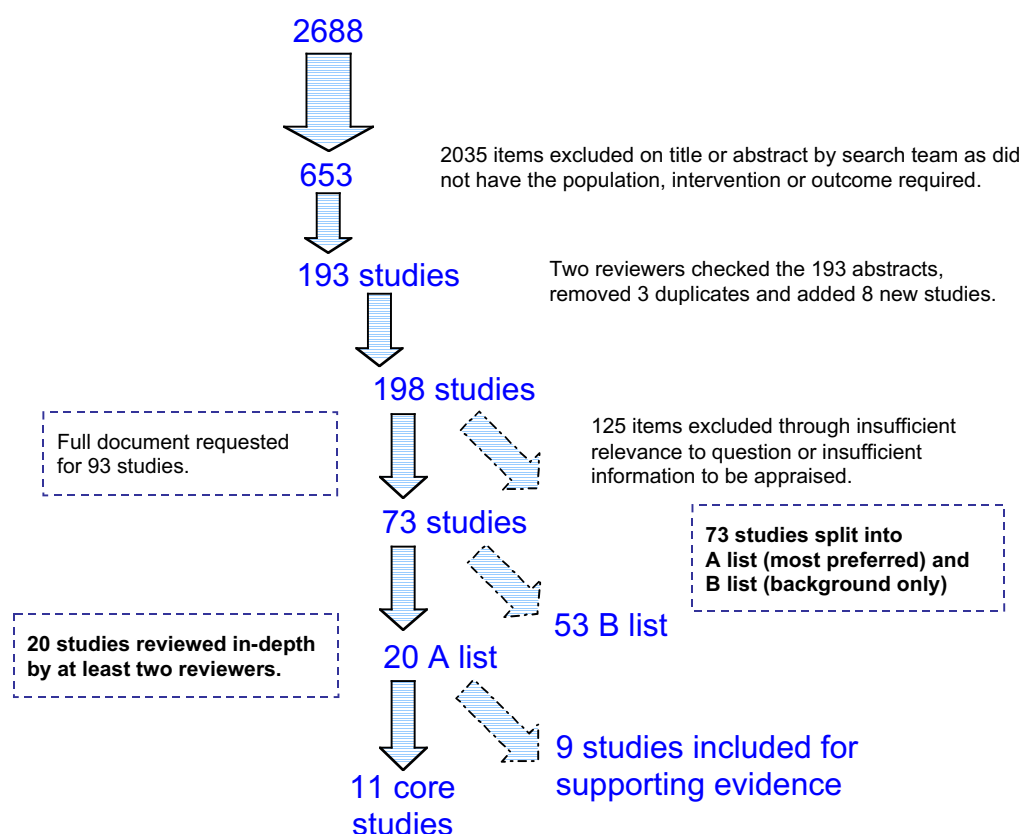
The team of six reviewers, including four reviewers external to NCVER (see appendix 1), were trained to use the software developed by the Joanna Briggs Institute.[1] At least two reviewers independently appraised the 20 studies selected in the A list and extracted the evidence and findings for synthesis in this report. As shown in table 1, 11 of these studies were judged as most relevant and of the highest quality, and these were considered to be core studies which evaluated intervention strategies. Tables A6 and A7 in appendix 3 summarise these 11 studies in terms of their research methodology and evidence of meeting the needs of small business.

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[1] The Joanna Briggs Institute is an international research and development agency based in Adelaide, and is an affiliated research centre of the University of Adelaide and the Royal Adelaide Hospital.

As indicated in table 1, the reviewers considered that the other nine A list studies were either slightly less relevant, or of slightly lower quality in answering the review question, but nonetheless provided useful supporting evidence. Tables A8 and A9 in appendix 3 summarise how these nine studies meet the selection criteria for our systematic review.

The 20 studies (A list) are outlined in the next chapter.

Table 1   Summary of the 198 studies after independent appraisal by at least two reviewers

		Quality of study		
		High	Medium	Low
Relevance to review question	High	**35, 94, 133, 133a, 226, 236, 260, 604, 715, 725, 731** (11 core studies)	Supporting evidence 261, 693, 701	Excluded
	Medium	Supporting evidence 167, 384, 415, 500, 686, 694	**B list**—53 studies	Excluded
	Low	Excluded	Excluded	Excluded—125 studies

This report

This report focuses on the evidence found to answer our systematic review question. The 20 studies included in the synthesis of the findings are discussed in the next chapter. This is followed by the synthesised findings, which include essential features of successful small business training and learning, and discussion of the strategies. Finally, we comment on the gaps in our knowledge of strategies and their impact on training and learning in the diverse range of small businesses.

The included studies

This chapter outlines the 20 studies which provide clear evidence of what works for small business in the education and training arena.

The core studies

The 11 core evaluation studies in whose findings we have confidence to answer the review question are briefly described below.

35   GHK Economics & Management, 1997 [core], *TECs and Small Firms Training: Lessons from Skills for Small Businesses*, Research report 27, Department for Education and Employment, United Kingdom, Suffolk.

This study evaluates the Skills for Small Businesses initiative in the United Kingdom, introduced in April 1995 and which operated for two years, for small firms defined as having fewer than 50 employees. The program provided free training in between one and six National Vocational Qualification units for a 'key worker' in each firm to act as 'training champion' and prepare the firm's training plan. It highlights some key principles and practices in working with small firms, which have continued currency for training and enterprise councils, Business Link's Workforce Development Teams and their training providers. This scheme precedes that seen in studies 236 and 260 (Hirst, A, Lefaucheux, M & Rinne, S 2003, 2005).

94   Maton, K 1999 [core], *Evaluation of the Small Firms Training Loans Scheme,* by United Kingdom Research Partnership Ltd, Research report 97, Department for Education and Employment, Suffolk.

This study is an external evaluation of the Small Firms Training Loans scheme which was operated in the United Kingdom by the Department for Education and Employment with the support of its partner organisations, the training and enterprise councils, the Chamber of Commerce Training and Enterprise, Business Links in England and Wales, and the local enterprise companies in Scotland. The scheme aimed to assist small firms with up to 50 employees to develop and finance their training plans by facilitating bank loans with an interest-free period (termed a 'repayment holiday'). Operating from 1994–98, this scheme preceded that which was the subject of studies 236 and 260 (Hirst, A, Lefaucheux, M & Rinne, S 2003, 2005).

133   Kearney, P 2000 [core], *Size matters: National summative evaluation report of the Small Business Professional Development Best Practice Programme 1996–2000*, Office of Vocational Education and Training, Hobart.

This report brings together lessons learned over the life of the Small Business Professional Development Best Practice Programme which operated from 1996 to 1999 with funding from the Australian Government. The program was managed by the Tasmanian Office of Vocational Education and Training, and each participating state and territory had to supply a project coordinator and appoint a steering committee. The report provides the results of the longitudinal evaluation study and provides an overview of the program, including its

positioning, management and history, and gives an account of the models and approaches successfully used with small workplaces. Study 133a (Kearney 1999) is the report of the 1998 program while study 25 (Cotton 1997) is a formative evaluation of the program.

133a   Kearney, P 1999 [core], *Big pictures from the small end of town: 1998 Small Business Professional Development Programme evaluation report*, Office of Vocational Education and Training, Hobart.

This study evaluates the Small Business Professional Development Programme in 1998. It includes a background to the program, a discussion of issues requiring attention by policy-makers, outcomes of the longitudinal evaluation of projects which began in 1997, reports on the individual 1998 projects, and three case studies. The programme operated from 1996 to 1999 with funding from the Australian Government. Study 133 (Kearney 2000) is the final report on this program, while study 25 (Cotton 1997) is a formative evaluation of the program.

226   Dufty, 2002 [core], *Small Business Smart Business Get Smart—Get into training: Final report and evaluation,* with the support of the Small Business Development Corporation and business enterprise centres, Western Australia Department of Education and Training, Perth.

This study, conducted by an external researcher, evaluates the Western Australian statewide government-funded incentive scheme for small businesses (with fewer than 20 employees) to participate in training to improve business productivity. The Small Business Smart Business scheme provides a voucher up to $200 for training approved by the local business enterprise centre. Each of the 27 regional and ten metropolitan business enterprise centres was required to develop a strategy applicable for their community to increase the uptake of small business training. This scheme is also evaluated in study 731 (Walker, B & Webster, B 2004).

236   Hirst, A, Lefaucheux, M & Rinne, S 2003 [core], *Evaluation of the Pilot Small Firm Development Account*, Research report 466, Department for Education and Skills, United Kingdom, Nottingham.

This study was undertaken by the Cambridge Policy Consultants to evaluate the pilot Small Firm Development Account program conducted in four counties of England. This program aimed to increase engagement with workforce development to improve business performance. The pilot provided 314 small businesses (with 5–49 employees) with support and training to establish a training champion, develop a training plan and undertake the training in the plan. On completion of the training, businesses were reimbursed 50% of the training costs (up to £150 per employee). The pilot was designed and managed by the Centre for Enterprise, an independent not-for-profit company based in Leicester, which researches, develops and delivers innovative approaches to workforce and management development. Local Business Link Workforce Development Teams recruited firms to the program.

260   Hirst, A, Lefaucheux, M & Rinne, S 2005 [core], *Evaluation of the Pilot Small Firm Development Account year 2*, Research report 619, Department for Education and Skills, United Kingdom, Nottingham.

A second study undertaken by the Cambridge Policy Consultants to evaluate how well the extension (second) year of the pilot Small Firm Development Account program worked in terms of further developing structured approaches to learning. Firms (with 5–49 employees) which participated in the first year (developing a training champion and training plan) were invited to participate in the second year, which included additional options, such as management and leadership training, a training adviser, mentoring and networking opportunities.

604   Devins, D & Johnson, S 2002 [core], 'Engaging SME managers and employees in training: Lessons from an evaluation of the ESF Objective 4 programme in Great Britain' in *Education and Training*, vol.44, issue 8/9, pp.370–7, London.

This article reports on analysis of a subset of the larger database used in the 2001 report by Devins, Johnson and Bolam from the Policy Research Institute, Leeds Metropolitan

University. This article draws on a telephone survey of 116 independent small and medium-sized enterprises with fewer than 100 employees to explore the extent to which training interventions that have targeted managers affect their perceptions of the value of training and encourage a process of lifelong learning. Since few of the employers were of equivalent size to small business in Australia, the findings from this study should be used with caution.

715   Dusseldorp Skills Forum, 1999 [core], *Business mentors: Supporting small business in Tasmania and on the Central Coast of NSW*, Dusseldorp Skills Forum, New South Wales, Ultimo.

This report by the Dusseldorp Skills Forum, a not-for-profit organisation with the broad charter of stimulating innovation in employment and educational practice, documents the successes and barriers to success found in two facilitated business mentoring programs. Both programs had a coordinator who facilitated the matching of those less experienced business managers seeking assistance with a more experienced voluntary business mentor drawn from the local community's pool of retired, semi-retired and active business people.

725   Hughes, M & Stanton, G 2005 [core], *Talking the right language: Can further education offer support for business innovation? Feasibility study report*, Learning and Skills Development Agency, London.

This feasibility study includes data from an earlier consultation by the Learning and Skills Development Agency to look at the development of the concept and criteria for Business Innovation and Support (BIS), a program for small and medium-sized enterprises led by further education colleges. Business innovation and support is defined as 'support for company innovation and development, primarily intended to improve a company's products and performance' (for example, limited applied research and development rather than training and generic business support) and facilitating local business networks.

731   Walker, B & Webster, B 2004 [core] (unpublished), *Small Business Smart Business: Final report*, Small & Medium Enterprise Research Centre of Edith Cowan University for the Western Australian Department of Education and Training, Perth.

This study, conducted by external researchers, evaluates the Western Australian Department of Education and Training statewide incentive scheme for small businesses (with fewer than 20 employees) to increase participation and access to training, develop a training culture and improve productivity for small businesses. A training voucher valued at up to $200 was provided for training approved by the local business enterprise centre. Each of the 27 regional and ten metropolitan business enterprise centres was required to develop a strategy applicable for their community to increase the uptake of small business training. This is the second evaluation study for this scheme and complements study 226 (Dufty 2002).

Overview of core studies

Five core studies are from Australia and the other six are from the United Kingdom.

Australian core studies

Two recent Australian studies (Dufty 2002; Walker & Webster 2004) evaluate the Small Business Smart Business scheme in Western Australia. Two earlier Australian studies (Kearney 1999, 2000) evaluate the Small Business Professional Development Programme (1996–1999), while the fifth Australian study by Dusseldorp Skills Forum (1999) reviews two local voluntary business mentoring programs in two states: Tasmania and New South Wales. These studies are summarised in table 2.

Table 2   Summary of the Australian programs and strategies

Author and date/s	Target population	Main program and strategies	Education and training options
Kearney, P 1999, 2000	Small business with fewer than 20 employees in all states and territories	Small Business Professional Development Programme (1996–99) funded by the Australian Government in collaboration with state/territory governments which appointed steering committee and coordinator. Programme managed by Tasmanian Office of Vocational Education. 1997 projects used 4 types of strategies: training awareness-raising; direct training (using training provider or cooperative cluster); business management development (using expert-driven models such as business consultants); and mentoring (Cotton 1997). 25 projects in 1998 included self-help collaborative strategies such as mentoring, clustering, networks, action learning, needs analysis and orientation tools, benchmarking and sessional delivery (direct training). 30 projects in 1999 focused on sustainable solutions and transferability through new intermediaries and important new areas: e-commerce, Indigenous businesses and sole operators.	27 projects in 1997 trialling different approaches to addressing small business needs and raising awareness of the value of training. 25 projects in 1998 include mentoring, clustering, networks, action learning, needs analysis and orientation tools, benchmarking and sessional delivery. 30 projects in 1999 focused on sustainable solutions and transferability through new intermediaries and e-commerce, Indigenous businesses and sole operators.
Dufty, P 2002; Walker & Webster 2004	Small businesses (2–20 employees) in Western Australia (metropolitan and regional areas); 16 825 participants over 4 years	Small Business Smart Business scheme (2000–03) provided a financial incentive up to $200 training voucher to spend on approved training that improves business productivity; funded by WA Department of Education and Training and delivered by business enterprise centre network throughout Western Australia (27 regional and 10 metropolitan centres).	Training brokered by business enterprise centres; most participants used private providers and undertook training in computing and information technology; 2002 report found that 43% participants used non-RTOs, while 40% used non-TAFE RTOs and 6% used TAFE.
Gordon Consulting 1999	Small business owners (fewer than 20 employees) in Tasmania, and a second program on Central coast of New South Wales	Two facilitated business mentor programs: Mentor Resources Tasmania started in Hobart in 1995 and NSW Central Coast Business Mentor Services[2], starting in 1998, aim to support small business through provision of experienced volunteer mentors drawn from the local community's pool of retired, semi-retired and active business people. The program coordinator matches mentor to mentoree. Facilitated mentoring is a deliberate pairing of a more skilled or experienced person with a lesser skilled or experienced one, with the agreed goal of having the lesser skilled person grow and develop specific competencies.	Business advice, training workshops; crisis mentor team 'Providing a sympathetic and non-judgemental ear, the mentor's role is focused on opening doors for their clients, identifying possible actions and explaining likely outcomes'.

Note: RTO = registered training organisation; TAFE = technical and further education.

United Kingdom core studies

The recent United Kingdom studies by Hirst, Lefaucheux and Rinne (2003, 2005) evaluate the pilot Small Firm Development Account program. Maton (1999) evaluates the earlier scheme: Small Firms Training Loans, and GHK Economics & Management (1997), the Skills for Small Businesses scheme. In their article, Devins and Johnson (2003) report an analysis of a subset of the larger database used in their evaluation report of European Social Fund Objective 4 programmes in Britain (1998–2000) (Devins, Johnson & Bolam 2001). Hughes and Stanton (2005) report on the feasibility of further education colleges providing business innovation support (or limited research

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[2] Central Coast Business Services Inc. is a non-profit organisation located in the Business Incubator Centre at the Ourimbah campus of the University of Newcastle.

and development) for small businesses, and facilitating local business networks. These studies are summarised in table 3.

Table 3   Summary of the United Kingdom intervention programs and strategies

Author and date/s	Target population	Main intervention or strategy	Education and training options
GHK Economics & Management 1997	Small firms with fewer than 50 employees who were recruited through 10 selected TECs. No size of participating population given.	Skills for Small Businesses scheme used the strategies of financial incentive and direct training in providing free training for a key worker ('training champion') to undertake 1–6 NVQ units and develop a training plan for firm. Program was run through 10 selected TECs, which either subcontracted to training provider, supported sub-contracted training provider with involvement in marketing, recruitment, vetting and/or follow-up, or delivered the training themselves. Targeted firms had not had previous assistance from TECs.	Participating firms included those with positive attitude to training or who had not really come to terms with training or wanted advice and support; the majority had not received any previous assistance from TECs.
Maton, K 1999	Small firms with fewer than 50 employees in England At least 298 firms in England, Scotland and Wales took out 346 loans (some firms took multiple loans).	Small Firms Training Loans scheme used the strategy of financial incentive via 'interest free' loans from participating banks with 'repayment holiday' period supported by the Department for Education and Employment for firms to finance their training plans. Note: From the administration data for 346 loans, half of the loans were supplied by Barclays Bank which also had a 'cash back' promotion linked to the size of the loan from September 1996 to end of 1998.	Computer software training was most popular. 62% of all loans were taken up by micro-businesses (with 5 or fewer employees), most were less than 3 years old and mostly accounting, legal services, market research, management consultancy and computer-related firms.
Devins, D & Johnson, S 2002	Small and medium-sized enterprises (employing under 100 employees); analysis of sub-set of larger database (see study ID734)	Great Britain's ESF Objective 4 programme used strategies of financial incentive and direct training. Most ESF money in England was distributed to projects through the learning and skills councils, Jobcentre Plus and other organisations, such as regional development agencies and local authorities. These organisations were responsible for finding matching funding in a system known as 'co-financing' to ensure projects were fully funded.	The majority of the participants undertook training in management and information technology. (46 involved managers and employees; 26 managers only; 44 only employees.)
Hirst, A, Lefaucheux, M & Rinne, S 2003, 2005	Small firms (5–49 employees) in 4 English counties: Derbyshire, Leicestershire, Lincolnshire and Nottinghamshire 314 small firms who completed the first year were invited to continue (217 continued).	Small Firm Development Account pilot program used several strategies, including financial incentives, direct training and ongoing business-specific support through an intermediary, the Business Link training advisor. The program provided support and training to establish a 'training champion', develop a training plan and undertake training in the plan. Funding by DfES and LSCs, £500 towards workshop, reimbursed 50% of the training costs (up to £150 per employee). There was a one-year extension to develop a second training plan with the training advisor and up to £1000 for implementing training plan, and new options included up to £1000 for attending an approved leadership and management course, Small Firm Training Toolkit, services of a mentor for six months (to value of £500) and free membership of training network.	Designed and delivered by Centre for Enterprise; companies were recruited by Business Link Workforce Development training adviser who supported the 'training champion' in the small firms. Subsequent staff training covered a broad range from one day in house to 12-month college-based courses.
Hughes, M & Stanton, G 2005	Local, large and small firms around 24 further education colleges Two 'business innovation support' activities in each of 24 further education colleges	Further education colleges used strategies of business networking and business innovation support—defined as 'non-training' support intended to improve a firm's products and processes, such as limited research and development—is useful for small firms without internal resources, for example, market research; prototype or computer program building and testing; design facilities for restaurants and kitchens; other knowledge transfer, such as digital imaging; technical support; research and advice for small engineering and manufacturing firms; environmental monitoring and audits.	Business innovation support provided by further education colleges can create and support small business networks, for example, Rural Enterprise Network—various businesses meet together for mutual support; Business Innovation and Support centre is ready with technical, legal and business-planning advice and limited research or consulting services.

Note: TEC = Training enterprise council; ESF = European Social Fund; DfES = Department for Education and Skills; LSC = Learning and skills council; NVQ = National Vocational Qualification.

Supporting evidence

The reviewers considered that nine studies provided useful supporting evidence for the planning, promotion and implementation of successful strategies. Briefly described below, these nine research studies are:

167   Figgis, J, Alderson, A, Blackwell, A, Butorac, A, Mitchell, K & Zubrick, A 2001 [supporting], *What convinces enterprises to value training and learning and what does not?,* NCVER, Adelaide.

Using real and detailed exemplar case studies of enterprise training and learning experiences, stage 2 of this study evaluates a specific strategy to approach small business owner–managers and engage them in conversations about flexible approaches to education and training for them and their employees. By including formal and informal approaches in frank, generous and authentic case studies, most employers were willing to discuss their current approaches to training and learning and business needs.

261   Confederation of British Industry, 2005 [supporting], *Employers' collaboration to raise skills in supply chains and clusters*, Confederation of British Industry, London.

In 2004, the Confederation of British Industry conducted a study among its 5000 members to investigate the effect of employers' collaboration in raising staff skills. This study aimed to establish the key factors driving the collaboration process or the barriers preventing the activity from taking place. Attracting 421 employer responses to its electronic questionnaire (8% response rate), the researchers backed this with 30 follow-up case studies to obtain samples of good practice, employing collaboration and in-depth interviews to explore the function of the supply chain and cluster approaches to collaboration.

384   Hughes, M, Keddie, V, Webb, P & Corney, M 2002 [supporting], *Working towards skills: Perspectives in workforce development: Research report*, Learning and Skills Development Agency, London.

This report draws on the views of employers and employees of small firms on workforce development and related initiatives. Attracting only 85 responses (4.2% response rate) from a postal survey of 2000 small firms (with 2–50 employees) in the United Kingdom, researchers backed this with follow-up interviews with 12 managers. The report provides evidence of employer attitudes to training; that is, it leads to better productivity and better motivated staff, but also leads to increased wages and disruption at work.

415   European Training Foundation 2000 [supporting], *Entrepreneurial training for growth of small and medium-sized enterprises: Lessons from Central and Eastern Europe: Report*, European Training Foundation, Office for Official Publications of the European Communities, Luxembourg.

This European Training Foundation project used extensive measures to identify best practice training programs in the transition economy countries. The selected local training provider personnel from seven countries were given detailed instructions and a training workshop before preparing their case studies. The enterprises considered for the case studies had between ten and 150 employees, at least one year of consolidated operation, and demonstrated capacity to improve turnover and increase market share. 'Entrepreneurial training' in this context means all kinds of support and assistance addressed to entrepreneurs in the context of transfer of knowledge, expertise and attitudes, or facilitation thereof.

500   Billett, S, Ehrich, L & Hernon-Tinning, B 2003 [supporting], *How small business learnt about the goods and services tax: Lessons for vocational education and training*, NCVER, Adelaide.

Experiences of small businesses complying with a new government legislation, the goods and services tax (GST) and business activity statement (BAS), were used in this study to develop an understanding of how small businesses approach (and execute) the requirement to learn new skills and concepts. Different approaches were used to guide learning, and the study

illustrates the importance of networks, external advisers, such as accountants and business consultants, and specifically focused training courses provided early in the learning process.

686   Gordon Consulting 1996 [supporting], *The Enterprise Training Mentor Program: An effective strategy for a mentoring program for on-the-job trainers in smaller enterprises in the Geelong region and a proposal for expansion*, Rohm and Haas Vocational Education and Training Research Unit, Gordon Institute of TAFE, Geelong.

The Gordon Institute of TAFE, at the request of the Office of Training and Further Education in Victoria, set out to provide evidence for best practice in training 'volunteer' business mentors. This study created and trained a core of committed and recognised mentors, evaluating and documenting the process. The mentor training program ran for about six months and is described as action learning, where the group of mentors took considerable responsibility for their own learning.

693   Holgate, J 1999 [supporting], *Women in Small Business Mentoring Program*, Professional and Career Development Unit, Western Australian Department of Training, Perth.

This study reports on a six-month pilot Women in Small Business Mentoring Program which ran in 1998 in Perth. It was funded jointly by the Australian Government Small Business Professional Development Programme and the Western Australian Department of Training. The author, who was also coordinator of the program, concludes that the success of the program was due to the two-pronged approach involving paired mentoring meetings, whole-group workshops and networking. Fortnightly workshop topics and their format were responsive to specific group needs and there was flexibility to allow for the development of a variety of partnerships.

694   Van den Tillaart, H, van den Berg, S & Warmerdam, J 1998 [supporting], *Working and learning in micro-enterprises in the printing industry: A comparative research study into the relationship between technological and organisational developments and training activities in micro-enterprises in the printing industry in four European countries: Synthesis report*, CEDEFOP, Thessaloniki.

This study investigated the survival strategies employed by small printing enterprises in response to rapid technological change in the printing industry and the role of training in this survival process. The case studies focus on a specific small enterprise from each country (Finland, Spain, Ireland and The Netherlands) and demonstrate the differences between firms in relation to their operations and subsequent training and learning strategies and practices.

701   Research Australasia and ResolveNorth, 2000 [supporting], *Our business, our way: Indigenous perspectives on small business learning*, Tasmanian Office of Vocational Education, Hobart.

This study evaluates four Indigenous projects which were selected from 100 submissions under the Australian Government-funded Small Business Professional Development Programme in 1999. The projects tested four models in four different Indigenous communities, including remote and urban, and two were associated with the Community Development Employment Projects scheme. Model 1: Galiwin'ku project used audiographic technology to overcome distance barrier to training for a remote Northern Territory island community; Model 2: Cairns project involved a group sharing experiences to build on existing skills and knowledge of participants; Model 3: Stradbroke Island and Gold Coast projects trained a local facilitator to present workshops to raise awareness of issues related to small business operation; Model 4: the Sydney and Forster project established a small business network. Indigenous small business groups enjoy sharing skills, knowledge and experiences, and participants clearly show a preference for an adult learning approach—an interactive, informal and non-threatening training style.

The findings

Strategy is concerned with how we achieve the policy or desired objective (Nickols 2000). The intervention strategies are the means by which participation (in education and training that meets small business needs) is achieved. Strategies are the ways in which the resources are deployed to achieve our objective. Successful strategies are those that provide tangible and intangible benefits to small businesses. So what strategies work for small business?

This chapter synthesises the findings from the 20 included studies. It notes that financial incentives or subsidies alone are not sufficient for training to meet small business needs. Many small business managers do not see a relationship between training and their business needs. They must be convinced of the value of the education and training and that it is in line with their interests. Thus, strategies that work for small business are clearly focused on business needs rather than driven by government agendas and funding. Small business also needs ongoing business-specific support.

Strategies that fit with the way small business learns are clearly more successful than direct or formal training alone. Strategies therefore must focus on current or real issues contextually embedded in the work environment, and utilise informal learning processes, especially learning from other business people.

Strategies which include a personal approach to small business managers in order to understand their business-specific needs are more successful than mailing brochures or similar promotions. Only then can the training broker or consultant individualise training information, content and delivery to meet the needs of the diverse range of small businesses. Strategies which achieve participation of small business managers and employees in education and training involve a flexible approach to the provision of training information, content and delivery.

Strategies for small business training which build on business-to-business interactions are most successful. These strategies included business mentoring, networking, and collaborative or group learning with other businesses through clusters, alliances or action learning. Other effective strategies include diagnostic services such as training needs analysis, and benchmarking processes against other organisations. Programs which employ a number of these strategies work better than those relying on a single approach.

Finally, this chapter discusses other strategies which have been cited in the literature but for which evaluation studies were not found for this review.

Financial incentives—lowering the costs of formal training

Financial constraints were most frequently identified by small firms in the United Kingdom as the main barrier to undertaking formal training, while time and staffing resources were the next most common barriers mentioned (Hirst, Lefaucheux & Rinne 2003 [core]). To overcome the perceived financial barrier, many government initiatives provide a financial subsidy to support participation of small business in formal training. For example, an incentive for participating in the Small Firm Development Account program was the reimbursement of 50% of the cost (up to £150 per employee) for structured training implemented by the firm after developing a training plan. Government funding subsidised the costs of education and training activities in the Australian Small Business Professional

Development Programme (1996–99). Similarly, subsidisation of training costs for direct training was part of the Western Australian Small Business Smart Business training voucher strategy, the United Kingdom Small Firms Training Loans and Skills for Small Businesses schemes, and Great Britain's European Social Fund Objective 4 programme. However, financial incentives alone are not sufficient to meet small business needs as indicated by the low participation rate of small business in most government initiatives in the United Kingdom (Maton 1999 [core]; Matlay 2002a).

Financial incentives or subsidies are clearly useful in engaging some businesses who otherwise may not pay for training (Hirst, Lefaucheux & Rinne 2003 [core]; Walker & Webster 2004 [core]; Maton 1999 [core]). However, there is clear evidence that small business managers are willing to pay for education and training for themselves and their employees, if they see the value in it and it is in line with their interests or meets their needs. For example, Hirst, Lefaucheux and Rinne (2005 [core]) noted that most businesses undertaking the second year of the Small Firm Development Account program did not seek the available reimbursement of the cost of staff training in the second year (since they had embedded the training-plan approach into their business planning). Kearney (2000 [core]) notes that, as part of the evaluation of the Small Business Professional Development Programme, '98% of the 200 small business sampled in the programme's longitudinal evaluation are willing to pay upon receipt of the service' (p.42). In addition, small business managers paid a substantial amount for training in some projects, such as the $4000 package for the fee-for-service 1998–99 Total Retail Improvement Programme delivered by the Retail Traders' Association Victoria consultants for fortnightly mentoring for six months, training brokerage, on-call advice and benchmarking tools and analysis (Kearney 1999 [core], p.142). Similarly, members paid $1000 fee to be part of Bundaberg Business Cluster (Kearney 2000 [core], p.105) and $250 for the Western Australian Small Business Mentoring Program, including one-to-one mentoring sessions, guest speakers, business discussions and networking over five months (Holgate 1999 [supporting]).

Strategies that work for small business, however, may include ways to lower the cost of training and learning for small business. These include business mentoring, building networks and workplace coaching, or reducing cost per trainee through working together with other companies (for example, supply chains and clusters) to provide formal training for themselves or their employees (Confederation of British Industry 2005 [supporting]). It should be noted, as Kearney (2000 [core]) points out, that 'informal learning, on-the-job learning and use of business networks may satisfy the needs of many small businesses' (not 'all small businesses need training'; 'not all small businesses want to grow'; 'not all business needs require a training solution').

In contrast to lowering the cost of training, 'low-risk buying' was found in the Small Business Professional Development Programme (1996–99) to be a useful strategy for enticing small enterprises into more structured approaches to training or learning (Kearney 2000 [core]). 'Low-risking buying' provides an assurance process when the customer is not familiar with the product and so takes the risk out of buying the education and training services by relating price and payment to outcomes and satisfaction. Mechanisms include:

✧ 'try before you buy'

✧ 'pay as you go'

✧ money-back guarantees

✧ short billing—paying a portion or all of the invoice according to your satisfaction or the achievement of agreed targets

✧ service guarantees, where the service is continued free of charge until the targets are met.

Focus on business-specific needs

Often small business managers do not perceive that they have business-related training needs (Hughes et al. 2002 [supporting]). Hughes et al. identified a range of activities which provide

opportunities for education and training of employees, including active learning and in-house learning, and informal and formal training. While most employers agreed that developing the workforce leads to increased productivity, some small business employers believe that it leads to 'increased wages', 'disruption to work' and 'poaching staff'.

Small business managers need to be convinced, every time, that the education and training will meet their specific business needs before they are willing to participate in it (Hirst, Lefaucheux & Rinne 2000 [core]; Kearney 2000 [core]: Figgis et al. 2001 [supporting]). The Kearney 2000 Australian report evaluating the Small Business Development Programme established that the main small business interests were productivity, profits and survival. The projects which sold economic outcomes (for example, 'How to improve your bottom line', 'Hygiene: it MEANS Business', 'Grow your business, Exceed your customers' expectations, Win against all competitors') had more success and less difficulty recruiting small business participants than those selling 'training' or 'improved skills' (Kearney 1999 [core]). In fact, it was found that even using the word 'training' in promotional material could deter potential participants. These included those employers who did not see a relationship between training and their business needs and also those who had had a negative experience of education and training in the past, especially Indigenous Australian small business operators (Research Australasia and ResolveNorth 2000 [supporting]).

In line with a focus on business needs, it has been found that small businesses have specific education and training needs which change with the stages of the development of their business. The business cycle includes stages, such as start-up, crisis and/or survival, expansion and/or growth, and export and/or internationalisation. Both the Dusseldorp Skills Forum (1999 [core]) and Kearney (2000 [core]) conclude that small business managers should be targeted for education and training at the different stages in the development of their business. In addition, Figgis et al. (2001 [supporting]) noted that the responses of enterprises to overtures and information about training and learning depend on the timing (since business needs change). Billet, Ehrich and Hernon-Tinning (2003 [supporting]) noted that to comply with the new goods and services tax (GST) legislation, there was gradual movement for small business operators from initial reliance on external sources (local networks, consultants/tax specialists, government support, industry association or family members) to a capacity to handle the demands of learning the task independently. However, this movement was completed at different stages for individual small business operators.

In line with a focus on business needs is the requirement for facilitators and trainers to have appropriate networks and experience to enable them to be trusted and respected by all small business participants. Especially for Indigenous Australians, facilitators and trainers must be 'culturally appropriate' and follow the protocols of the particular Indigenous community (Research Australasia & ResolveNorth 2000 [supporting]). The seven factors of 'culturally appropriate' VET for Indigenous Australians have been defined in a previous systematic review (Miller 2005).

In addition, it is essential that any environment used for education and training is one in which all participants are comfortable and where adult education principles are followed, that is, informal, interactive and building on experience and knowledge of participants (Research Australasia & ResolveNorth 2000 [supporting]; Kearney 2000 [core]; Hirst, Lefaucheux & Rinne 2003 [core], 2005 [core]).

Small business needs which trigger training and learning

This review identified the following business needs as likely to create a demand for education and training:

✧ resolving a specific problem, for example, of product, service, quality or delivery

✧ understanding how to expand the business, for example, finding new opportunities or exporting

✧ increasing productivity and profit, for example, improving customer service or computing skills

- ♢ reversing the 'struggle to survive' especially cash flow problems, for example, needing to reduce costs or recognise new business opportunities

- ♢ developing entrepreneurship, for example, identifying problems and opportunities, team building and the process of delegation by owner–managers

- ♢ developing management and leadership skills, for example, team leadership, business planning, managing change, motivating staff, helping the business grow

- ♢ implementing compliance with new legislation, regulation, licensing or standards

- ♢ skilling new employees or employees whose role has changed.

Training and learning can also be triggered by a need to respond to increased competition, the introduction of new technology (or equipment or practices) or 'a lifestyle decision', for example, the desire to 'buy back time' for themselves and their families (Kearney 2000 [core]). More recently, the learning and training needs of small and medium-sized business managers in the United Kingdom were confirmed in four categories. Those were improvement in: general management skills; personal development and motivating staff skills; strategic management skills; and other related business skills, such as increasing growth, productivity and profits (Public and Corporate Economic Consultants 2006).

Related to this is the European Training Foundation (2000 [supporting]) study, which highlighted a strong focus in the process of entrepreneurial training on identifying the problems and opportunities confronting individual companies. These programs focused on identifying areas of potential business improvement, team building and the process of delegation by owner–managers. In this study, it was noticed that, while participants may add little to their knowledge by attending these programs, they added a great deal to what they could do with their existing knowledge base. This critical reflection appears to be the result of having time to think and the encouragement to structure their experience though discussion with other business people. The application of their knowledge was also enhanced through the networks they built by participating in the training program.

Related to focusing on business-specific needs and also linking informal learning processes to formal training is the feasibility study reported by Hughes and Stanton (2005 [core]). Their report highlights a two-way learning process between training provider and small business. This is illustrated by further education colleges in the United Kingdom which are providing non-training support, such as research and consultancy services, to small businesses. Further education colleges have also created and supported local business networks. When a network is created for small businesses with similar problems, they generally share knowledge and experiences. This may be the most cost-effective way to gain information, new knowledge and skills for small businesses. Such networks or clusters may lead to innovative ways to avoid skills shortages and create demand for training from small business. Similarly, in Australia, skill ecosystems, in which regional or industry groups of enterprises form long-term collaborative partnerships with VET providers, may increase demand for training, especially from small businesses (Smith 2005).

Ongoing business-specific support

In Australia, other strategies have been shown to meet small business needs. To meet the need for assistance with administration to employ apprentices, group training organisations handle the employment and off-the-job training and place the apprentice with a small business. Small business also needs integrated support services through a 'one-stop shop' (such as a business enterprise centre, industry or professional organisation or internet portals). Ongoing business-specific support may also include contextualised direct training provided by equipment and computer software suppliers (vendors), and in the franchise context.

In this review, a number of studies provide evidence to show that small business needs ongoing business-specific support, especially in the education and training arena. From the Australian Small Business Professional Development Programme, evidence was found that it was a strategic

advantage in the training arena for business service organisations to have 'established, structured, working networks with small business' (Kearney 2000 [core]). Small business requires a 'one-stop shop' approach to providing ongoing support and so, as found by Walker and Webster (2004 [core]), the business enterprise centres network (BEC Australia Incorporated[3]) assists many small businesses to meet their training needs. In the United Kingdom report on the Small Firms Development Account, a strong relationship was built between a Business Link Workforce Development Team training adviser and the small business manager or 'training champion' in the small firm (Hirst, Lefaucheux & Rinne 2005 [core]). This relationship provided the ongoing business-specific support to find the training that best meets the changing needs of the business. More structured training in small businesses was supported by encouraging small firms to develop a training-plan approach to meet their business needs. In the Skills for Small Businesses program, GHK Economics and Management (1997 [core]) found an ongoing impact with participants engaging with the training provider only where the training enterprise councils played a strong role in promoting and delivering the training program.

From this review it is noted that successful programs used a facilitator or business service organisation to enhance participation of, and benefits to, small businesses, as summarised in table 4. This use of a facilitator or business service organisation is often related to enhanced promotion which is designed appropriately to reach small business managers who have specific business needs but may not be positive towards training (Hirst, Lefaucheux & Rinne 2003 [core], 2005 [core]; Dusseldorp Skills Forum 1999 [core]; Kearney 2000 [core]; Figgis et al. 2001 [supporting]). It may include the personal approach and assistance to small business operators to analyse their business needs (Kearney 2000 [core]; Figgis et al. 2001 [supporting]; Hirst, Lefaucheux & Rinne 2003 [core], 2005 [core]). It may also be related to appropriate delivery by those who are able to provide ongoing support to these small business managers to assist them to address their future needs (Kearney 2000 [core]; Walker & Webster 2005 [core]; GHK Economics & Management 1997 [core]; Hirst, Lefaucheux & Rinne 2003 [core], 2005 [core]; Hughes & Stanton 2005 [core]).

Contextualised direct training

Direct training refers to formal training delivered to small groups by an external provider or expert. To meet the needs of small business, direct or formal training needs to be contextualised to the individual workplace and there must be a flexible approach to training content and delivery (Kearney 2000 [core]). Contextualised direct training is based on pre-packaged course components which have been customised or tailored for the individual small business to meet its specific business needs. Formal training is the same as structured training which is defined by ABS as 'all training activities which have a predetermined plan and format designed to develop employment related-skills and competencies' (ABS 1998, p.65). Periods of instruction, which can take the form of workshops, lectures, tutorials, training seminars, audio-visual presentations, demonstration sessions or monitored self-paced training packages, may be combined with monitored practical work (thus it can also include structured on-the-job training).

In contrast to formal training, indirect or informal training activities, as defined by the ABS, include 'unstructured' or 'unplanned' training that is provided as the need arises and training activity that is not monitored, such as self-training through reading manuals or using self-training computer packages' (ABS 1998, p.66). However, indirect training strategies, such as mentoring and networking, not only fit with the way small business learns, but can help connect small business to the recognised formal VET system (Kearney 2000 [core]).

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[3] BEC Australia Inc. was established in March 1999 to support the national network of business enterprise centres and their 'member' organisations.

Table 4   Summary of target populations, participants and role of facilitator or business service organisation in programs

Intervention program	Target population	Participants	Role of facilitator or business service organisation
Small Business Professional Development Programme 1996–99	Small companies with fewer than 20 employees in all states and territories in Australia	Total = 2257 participants i.e. 1402 small business people participated in 49 projects throughout 1997 and 1998, and 855 participants in 30 projects in 1999.	Business service organisations and other groups submitted a business plan for funding, then recruited participants for various projects, including mentoring, networks, clusters, workplace coaching, diagnostic services, benchmarking, action learning and direct training.
Small Business Smart Business scheme 2000–03	Small companies with fewer than 20 employees statewide in Western Australia	16 825 participants over 4 years	Business enterprise centre network (27 regional and 10 metropolitan) distributed training vouchers and approved the training.
Mentoring: Mentor Resources Tasmania (1995–98) and NSW Central Coast Business Mentor Services (1997–98)	Small business operators with fewer than 20 employees in Hobart, Tasmania and in Central Coast of New South Wales	In first year, 170 mentorees in Hobart, and in first year, 235 mentorees in Central Coast	Program coordinator first contact point for advice and support and facilitated matching of mentoree and mentor, and maintained network of local voluntary business mentors.
Small Firm Development Account pilot	Small firms (5–49 employees) in 4 English counties: Derbyshire, Leicestershire, Lincolnshire and Nottinghamshire	346 firms in the pilot program; 314 firms completed the first year and were invited to continue; 217 companies continued in the second year.	Participants ('training champion') recruited and supported by local Business Link Workforce Development training adviser who aimed to reach companies not involved in any other business initiative; program designed and delivered by Centre for Enterprise.
Small Firms Training Loans scheme	Small firms with fewer than 50 employees in England, Scotland and Wales	At least 298 small firms participated. 346 loans—over 60% of loans with 'repayment holiday' taken up by micro-enterprises with 5 or fewer employees.	Seven High St banks involved in scheme funded by DfEE; initially TECs promoted scheme but then left to banks. Bank and training provider staff unaware of scheme so uptake relatively low. Barclays Bank offered cash-back incentive linked to size of the loan (>50% the loans).
Skills for Small Business scheme	Small firms with fewer than 50 employees in TEC regions in United Kingdom	Total number of participants not known but sample A = 97 firms from first round and sample B = 50 firms from second.	TECs selected participants for free training of a 'key worker' to study 1–6 units of NVQ at level 3 or above, to act as' training champion' and prepare training plan.
Great Britain's European Social Fund Objective 4 programme	Program included small, medium and large-sized firms in England, Wales and Scotland	7000 employers and over 160 000 individuals participated over 2 years but only 116 firms with less than 100 employees included in data analysed in article.	Organisations (not individual firms) tendered for funding and in Britain most ESF funds were distributed to projects through the LSCs, Jobcentre Plus and other organisations, such as regional development agencies and local authorities. These organisations were responsible for finding matching funding in a system known as 'co-financing' to ensure projects were fully funded. Objective 4 provision focused on management and computer training. Most employers positive to training.
Business Innovation Support provided by further education colleges in United Kingdom	Small and medium-sized firms in areas related to 24 further education colleges in United Kingdom	At least two Business Information Support activities from each further education college are used as case studies in the feasibility report.	Business Innovation Support is defined as limited research and development to improve company's products and performance. Further education colleges create and support business networks, for example, Rural Enterprise network, and provide technical skills and knowledge, evaluation, monitoring and audit support as well as design and field or prototype testing.

Note: DfEE = Department for Education and Employment; TEC = Training enterprise council; LSC = Learning and skills council; NVQ = National Vocational Qualification; ESF = European Social Fund.

Fit with the way small businesses learn

There is clear evidence that, in the education and training arena, strategies which fit with the way small businesses learn are clearly more successful than direct or formal training (Kearney 2000 [core]; Figgis et al. 2001 [supporting]; Billet, Ehrich & Hernon-Tinning 2001 [supporting]). Previous literature has shown that small business managers and employees learn 'through doing' and much of their learning is focused on current or real issues contextually embedded in their environment (Rae & Carswell 2000; Gibb, A 1997). Two other important aspects are learning from other business people through social networks (Gibb, A 1997) and critical reflection on their assumptions, knowledge and experiences (Marsick & Watkins 1990).

With the diverse range of small businesses, the training broker or adviser can only understand the small business manager's business-specific needs through a personal approach. Only then can the training broker or adviser individualise training information and subsequent training content and delivery to meet the needs of each small business. Thus, a personal approach and flexible provision of business-specific training information, content and delivery are paramount to meeting small business needs (Kearney 1999 [core]; Figgis et al. 2001 [supporting]).

Personal approach by a training broker or adviser

Earlier we noted the different stages in the business cycle and how each small business is very different and has specific and changing business needs. This requires understanding of how formal VET can be carefully tailored (individualised or customised) to meet the needs of the specific small business and workplace. A strong relationship of trust needs to be developed between the business manager and the training broker or provider, as already noted. For many small businesses, the consultant needs to assist the manager to analyse the business needs.

'Word of mouth', especially using previous project participants to recruit new participants, was found to be a successful strategy for attracting small business participants in the evaluation of the Small Business Professional Development Programme (Kearney 1999 [core]). Similarly, Dufty (2002 [core]) reported that the small businesses were likely to gain information about the Small Business Smart Business scheme through 'word of mouth' and, for the United Kingdom Skills for Small Businesses program, participating small businesses were recruited by being approached directly. Figgis et al. (2001 [supporting]) noted that the most effective channel of communication with enterprises was 'personal interaction'. The direct approach with small business managers was found to provide an opportunity to discuss business needs and for both parties to achieve a common understanding of what was on offer.

Flexible provision of training information, content and delivery

Small businesses find it difficult to put aside sufficient time to fully engage with more formal training activities. Flexible provision of education and training information, content and delivery may include workplace visits by a training adviser, ways to minimise time away from the workplace, formal and informal learning (such as mentoring, networking, workplace coaching) and integration of formal training with informal learning processes in the workplace. This may include recognition of current competencies or prior learning (Dusseldorp Skills Forum 1999 [core]; Holgate 1999 [supporting]; Kearney 2000 [core]; Figgis et al. 2001 [supporting]; Hirst, Lefaucheux & Rinne 2005 [core]).

Informal learning processes

'Informal processes' are clearly an important feature of education and training to small business, as Figgis et al. (2001 [supporting]) point out, but what business people mean by 'informal' is 'simply the opposite of formal structured training', that is 'organised by an expert who has clear expectations of what skill or knowledge is to be learned'. These authors concluded that 'informality' refers to two different aspects of training and learning: the outcomes expected, and the guidance given to the learner. Outcomes can be specified in advance, such as values and mission, which must

be applied by everyone in the business. Alternatively, outcomes may be unknown in advance, such as when workplace teams are created to solve a workplace problem. Informal guidance of the learner may be incidental, such as a casual conversation, or 'intentional through mentoring, network meetings, job enrichment, modelling etc'. Informal learning can have a strategic role for individuals and groups, in contrast to 'informal training' as defined by the ABS as 'accidental' or 'unplanned' (see section on Contextualised direct training).

Strategies that work for small business focus on current or real issues and build on informal learning processes, especially learning from other business people. Business networks for small business managers with similar problems encourage sharing of skills, knowledge and experiences (Confederation of British Industry 2005 [supporting]; Holgate 1999 [supporting]; Research Australasia & ResolveNorth 2000 [supporting]; Kearney 2000 [core]; Hirst, Lefaucheux & Rinne 2005 [core]). This may include avoiding conflicts of interest by involving participants from different industry sectors (Holgate 1999 [supporting]) or from the same sector but in different regions (Confederation of British Industry 2005 [supporting]).

Workers and managers in an enterprise will learn from one another outside formal training programs, and so values and attitudes amongst employees at all levels influence the informal learning which takes place in the workplace. Requiring support from senior management, an organisational learning culture in the workplace amplifies the value of training and learning (Figgis et al. 2001 [supporting]). Informal learning includes what is learnt from managers, supervisors and peers or through family and social networks. Informal learning can be incidental, for example, values and attitudes learned through observation, or planned, such as workplace coaching from supervisor or peer.

Small business prefers informal, in-house learning approaches, but they can learn from the formal training system and develop more planned and systematic training and learning practices in the workplace (for example, through using a training-plan approach in their business planning). Similarly, the VET sector can learn from the informal-learning approaches used by small business to improve its flexibility in meeting the needs of small business (Kearney 2000 [core]).

Integration of formal training with informal learning processes

As noted earlier, strategies using business-to-business interactions are favoured by small businesses because they fit with the informal way small businesses learn. In addition, the Australian Chamber of Commerce and Industry has reported that small business employers prefer informal learning, such as mentoring and learning from peers, for two main reasons: because it is cost-effective and it minimises time spent out of the workplace by managers or employees (Australian Chamber of Commerce and Industry 2002). However, most enterprises use both formal and informal approaches to training and learning. It is important to note that the two approaches should complement one another, since 'informal learning amplifies the value of formal training' (Figgis et al. 2001 [supporting]). 'Informal learning by itself runs the risk of restricting people to old ways of thinking and working'; for example, family-owned and operated small businesses often struggle to survive if they do not take in new ideas. In addition, combining the features of the more direct (formal) and indirect (informal) approaches to training works better for small workplaces, but 'conventional [formal] training delivery can borrow from the informal approaches of small business and become more flexible and business outcome focussed' (Kearney 2000 [core]).

In the printing industry, small business managers and employees most often used experiential learning by themselves or with experienced colleagues and most effectively extended capabilities by taking on new work (Van den Tillart, van den Berg & Warmerdam 1998 [supporting]). In addition, most small business managers appreciate hearing how other businesses have responded to similar problems to their own (Figgis et al. 2001 [supporting]). These authors found that small business managers were interested in reflecting on their training and learning approaches and discussing their business needs in personal interviews after reading detailed case studies, including problems, issues and informal approaches. This technique of discussing the real experiences of other business people

is similar to the technique which is used in business mentoring and networking. It can assist them to relate their business needs to informal and formal education and training opportunities. The enterprises in this study acknowledge that the informal and formal approaches to training and learning need to be integrated.

There is now a large and growing body of work on the value of informal learning (Victorian Qualifications Authority's Recognition of Informal Learning project). Informal learning refers to personal and work-related skills development that occurs outside the formal recognition system. This development can occur through participation in paid employment, voluntary work or community activities or through the pursuit of activities and interests as individuals or in groups, such as discussion groups, meetings and workshops, or by taking part in non-recognised but planned and structured programs, such as short courses.

Successful strategies

Programs for small business training which build on business-to-business interactions are most successful. They need to reach those managers who do not see the value of education and training to their business needs. Successful strategies included business mentoring, networking, and collaborative or group learning with other businesses through clusters, alliances or action learning. Other effective strategies include diagnostic services such as training needs analysis, and benchmarking processes against other organisations.

Programs which employ a number of these strategies work better than those relying on a single approach. For example, the Retail Traders' Association Victoria's 1997 program for retailers, How to Improve Your Bottom Line, 'used a three-pronged approach of business benchmarking, mentoring and training' (Kearney 1999 [core], p.135), which was to become the forerunner to their 1998 Total Retail Improvement Programme.

Facilitated business mentoring

Dusseldorp Skills Forum (1999 [core]) defined facilitated mentoring as 'a deliberate pairing of a more skilled or experienced person with a lesser skilled or experienced one, with the agreed-upon goal of having the lesser skilled person grow and develop specific competencies'. Business mentoring was found to be widely applicable in the education and training arena through business-to-business interaction at different stages of the business cycle, that is, start-up, crisis and/or survival, expansion and/or growth or export and/or internationalisation. The Mentor Resources Tasmania program continues today with support from AusIndustry to maintain an existing network of volunteer mentors (AusIndustry 2006). The Central Coast Business Mentor Services Inc. also continues today with support from the Wyong Shire and Gosford City councils in New South Wales.

Supporting evidence of good practice for facilitated mentoring programs was supplied by Holgate (1999 [supporting]) and Gordon Consulting (1996 [supporting]). The Western Australian Women in Small Business Mentoring Program ran for six months in 1998 in Perth and was funded jointly by the Australian Government's Small Business Professional Development Programme and the Western Australian Department of Training (Holgate 1999 [supporting]). It involved two main approaches: one-to-one mentoring and business skills training, involving workshops, guest speakers, networking and business discussions.

Gordon Consulting (1996 [supporting]) provided supporting evidence for good practice in training 'volunteer' business mentors in regional Victoria. The authors found that the voluntary mentors were keen to talk about their experience and valued the frank and open exchanges, both in the larger group and between mentor partners. Most participants preferred verbal feedback to written reflection. Sharing ideas with the other participants and role-playing were found to be most valuable in training these business mentors.

Networking

Networks involve people coming together to achieve what they can not achieve on their own, and activity in networks tends to be driven by individual needs. In contrast, clusters are usually short-term networks which come together to complete a concrete task or solve an immediate problem of concern to all participants. The Confederation of British Industry (2005 [supporting]) study found that many employers reported working collaboratively in two or more categories of networks, and in addition, small firms used informal networks.

Business networks are important for informal learning in small businesses, as illustrated by the case studies of the micro-enterprises in the printing industry in Europe (Van den Tillart, van den Berg & Warmerdam 1998 [supporting]), of how Australian small business learnt to apply the new goods and services tax (Billet, Ehrich & Hernon-Tinning 2003 [supporting]) and of engaging employers in discussion about their business needs and training approaches (Figgis et al. 2001 [supporting]). The Sydney and Forster project (Model 4) reported by Research Australia and ResolveNorth (2000 [supporting]) successfully established a small business network, and the Aboriginal and Torres Strait Islander (ATSI) Business Women's Network became incorporated.

Business networks can also involve sharing training costs and lowering the cost of training for small businesses (see Collaboration and group learning below). Many existing networks can provide a corporate-style structure and the economies of scale necessary for a sustained approach to training, for example, supply chains, industry, professional and regional networks.

Collaborative or group learning

Giles-Peters (2005) claims that the main barrier to small business training in Australia is the economic difficulty of offering in-house courses, as the cost per trainee falls rapidly with increasing numbers of trainees in larger organisations. The Confederation of British Industry (2005 [supporting]) study highlights companies working together to improve their workforce skills as a cost-effective approach for small business for upskilling its workforce and overcoming skills shortages. Economies of scale can be attained by sharing training, but a key factor is the availability, or access to, training tailored to the needs of the enterprise. This study found that smaller firms are able to acquire high-quality training at reasonable cost using the training resources of larger companies through 'skills collaboration' in a supply chain or cluster. It defines 'skills collaboration' as 'firms working together to improve the skills of their workforce', for example, collaborative activity in an industry sector, local area or supply chain. Two main models of collaboration are noted: the 'hub and spoke' approach, where a large employer leads improvements among smaller firms such as in a supply chain, and a cooperative approach, where small firms work together for mutual benefit by mentoring each other, sharing skills or learning programs, or pooling skills to be more competitive in tendering for contracts. Four broad categories of inter-firm skills collaboration were noted: local area—related sector; local area—disparate sectors; national industry sector; and supply chains.

Having employers working together to improve the skills of their workforce in local areas may involve collaboration in more generic business issues or skills (Confederation of British Industry 2005 [supporting]). This study also noted that pooling training for firms from different regions or different sectors can overcome competitive or confidentiality concerns. Similarly, in the Women in Small Business Mentoring Program, mentor and mentoree from different industry sectors were deliberately paired to avoid competition and enhance different perspectives (Holgate 1999 [supporting]).

Research Australia and ResolveNorth (2000 [supporting]) provide supporting evidence that, if protocols are followed, working together as a group and sharing experiences assists the learning process and builds on the existing skills and knowledge of Indigenous participants. In the Galiwin'ku project (Model 1), the trainer was a well-known and respected educator with long-standing contact with the Galiwin'ku community and used appropriate teaching methodology based on adult learning principles. Training was in the local language with an appropriate elder as the local facilitator and, in

combination with the audiographic technology, the distance barrier of training was overcome. In the Cairns learning project (Model 2), participants were comfortable in the training environment, and collaborative learning was an acceptable methodology. The least successful project was the Stradbroke Island and Gold Coast awareness-raising workshops (Model 3)—no one attended the Gold Coast workshop. This emphasises the need for the Indigenous community to be involved in the planning and promotion of training to meet the needs of Indigenous small business. Indigenous small business groups enjoy sharing skills, knowledge and experiences. Participants in these projects clearly show a preference for an adult learning approach—an interactive, informal and non-threatening training style. The seven factors of 'culturally appropriate' VET for Indigenous Australians have been defined in a previous systematic review (Miller 2005).

Action learning

Kearney (1999 [core], 2000 [core]) found that clusters and networks often used action learning strategies, but this approach is dependent upon the natural stakeholders having a strong desire to 'fix the problem'. Action learning involves a group of stakeholders forming a team to solve a real and shared workplace problem. The team imports and questions knowledge to form a hypothesis which they test in real situations. Participants reflect on the processes and outcomes, adjust their solution and try it again. Following the action learning principles, processes and techniques makes it work in the right circumstances.

Diagnostic services and benchmarking

Diagnostic services provide an assessment process which gives a structured way for a business to review its current performance, look to the future, and identify areas for improvement. Kearney (2000) notes that when end users are involved in the design and validation stages of the business needs analysis tools, needs analysis becomes a useful way to make the connection between training and business needs. The aid and service are best customised to the small business (for example, showing the small business how to use the aid, analyse the outcomes and plan responses) as the link between business needs and training and solutions needs to be explicit.

Benchmarking was discovered in the Small Business Professional Development Programme to be a potent strategy for enticing small enterprises into more structured approaches to training or learning (Kearney 2000 [core]). Benchmarking can play a key role in shortening and underscoring the connection between business needs analysis, training solutions and business outcomes. It can be related to the use of diagnostic tools or establishing the provider's credibility and highlighting an area where training could make a difference, such as sales and service skills through a mystery shopper audit. Benchmarking can be internal, where business components are used to set standards before and after a training program, or external—against other comparable businesses in the industry sector. These performance figures provide tangible results to keep staff positive and committed to both training and continuous improvement in the business.

Kearney (2000 [core]) noted that the Australian Small Business Professional Development Programme did not explore models for genuine in-house small business training systems. However, he envisaged that working directly with such workplaces to develop and test micro-systems could produce transferable models for a more sustainable and strategic response to small business training. This remains a potential area for research.

Other possible strategies

Other strategies related to meeting the specific needs of small businesses were cited in the literature but the references were descriptions only and not evaluation studies. Other possible strategies include vendor training, e-learning, collaborative learning partnerships, workplace coaching, and job rotation. In addition, in-house small-workplace training systems or models could be explored.

Vendor training

Another important source of training in small businesses is through the suppliers of equipment or computer software, that is, vendor training. Although the term 'vendor' was specifically used in the literature search, only two of the 653 abstracts found by the searchers included the word 'vendor'. Smallbone, Supri and Baldock (2000) looked at skills acquisition in small printing firms in three contrasting regions in the United Kingdom. Through interviews with 35 key informants, this study investigated the current and future skill needs associated with technological change in the printing and publishing industry, particularly with respect to digital technology.

Vendor training usually relates to short-term induction training provided by the vendor in the workplace or attendance at more formal training off site, with training lasting from a few hours to a few days, depending on the complexity of the equipment. This initial training is typically supplied by the equipment or software supplier as part of the initial purchase price. Once these skills have been acquired by the key staff initially selected for training, they are typically disseminated informally to other workers. Subsequent problems have to be ironed out by the workers themselves, although limited support is provided through manuals and telephone help lines. Concerns were expressed by key informants that the initial training provided by the vendor was too short, as 'computer controlled litho and digital colour presses are reported to take six months or more to successfully master' (Smallbone, Supri & Baldock 2000). While emphasising that workers need the skills to solve individual problems and to learn 'through doing', these authors also reported that 'the most serious difficulties stem from incompatibilities between the equipment [or software] supplied by different manufacturers'.

E-learning

> In terms of learning the 'e' term has less to do with electronics and much more to do with the other 'e's: the engagement of the learner, the enhancement of the learning, the experience of exploration, the ease of use, the empowerment of the learner to control the learning schedule and the execution of the learning programme. (Roffe 2002, p.42)

Five projects investigating the impact of e-commerce on small business were funded in the Australian Small Business Professional Development Best Practice Programme (Kearney 2000 [core]). More recently, Webster, Walker and Brown (2005) investigated the use of online training by small businesses in the Western Australian Small Business Smart Business scheme, and their findings highlighted the lack of e-literacy of many small business owners.

Smallbone, Supri and Baldock (2000) highlighted the use of software tutorials often supplied by the equipment vendor or other training providers on CD-ROM or via a dedicated website. This is part of providing training via flexible delivery, which is particularly important for small business managers and employees. The literature search found many references to examples of e-learning, especially related to e-business and other information and communication technology skills.

Ward and Bennet (2004) worked with small franchised businesses in Australia to explore their training needs, the ways they engaged their employees, the barriers to technology and how resources and skills could best be utilised and shared between the businesses. This study describes an interactive e-learning model, 'enAble'. The web-based model divides the process of implementing e-learning into four manageable steps, which help clarify e-learning for industry. The development of the model involved small franchised businesses in the food and retail industry, while the final model was tested and trialled within the golf industry.

Collaborative learning partnerships

Mitra (2000) investigated the learning process, in particular the collective learning, underlying innovation in regional clusters. This author argues that innovation is often the result of interaction of various subjects, technologies, people and organisations, and that it is the learning derived from such interaction which underpins innovative activity. This study notes that small and medium-sized

enterprises are better able to innovate when they are part of clusters, because it is through the networking process and the management of externalities (key elements in clustering) that they develop new products, processes and services. As Porter (1998) noted, co-location of companies, customers and suppliers amplifies all of the pressures to innovate and upgrade through increased competition and cooperation: 'A cluster allows each member to benefit *as if* it had a greater scale or *as if* it had joined with others without sacrificing its flexibility'.

Networks and communities of practice bring together people with similar interests and backgrounds. In contrast, 'skill ecosystems', defined as 'concentrations of workforce skills and knowledge in an industry or region' by Windsor (2006), deliberately make connections across organisational and sectoral boundaries in order to address both supply of, and demand for, skills. Smith (2005) notes that skill ecosystems explore the drivers, opportunities and barriers that need to be addressed to hasten growth of the partners in a cluster, either in an industry or region. The skill ecosystem demonstration projects, funded by the Australian Government through the Department for Education, Science and Training, have enabled the development of long-term collaborative partnerships with VET providers. This author argues that these learning partnerships have led to increased demand for education and training, especially from small businesses.

Workplace coaching—learning from others in the workplace

Most small employers and managers already coach their staff on the shopfloor, giving advice, demonstrating and providing directions: for example, the 'Train the trainer' approach is based on workplace coaching.

Learning from colleagues or peer learning is a strategy that builds on small business learning through sharing experiences, skills and knowledge. In addition, collaborative learning or learning in teams or workgroups is used in many workplaces where supervisors or managers use coaching techniques to improve business performance or innovation. However, 'informal learning is often not acknowledged as learning within organisations' but just 'part of the job' (Boud & Middleton 2003). Boud and Middleton noted that there are a variety of networks through which learning takes place, including formal, such as work supervisors and colleagues, and informal and virtual networks, such as e-mail groups.

Family businesses may have specific problems and special learning needs, especially when it comes to transition in management or ownerships (Jaffe 2000; Matlay 2002b). Around 80% of Australian businesses are family-owned and operated. It is envisaged that about 60% of these will have an ownership change in the next six years and at present only a third survive to a second generation (Rann 2006). It is therefore important in all industries to engage family members in learning new ideas and new ways of working.

Job rotation

Job rotation or job swapping is used as an indirect training strategy for skills development in many businesses. No research studies were found on the topic of job rotation or job swapping for skills development in small business.

The 'Jobrotation' scheme in European countries tackles unemployment and skills shortages by offering a financial incentive for small business employers to train an unemployed person to replace their workers while they are absent from the workplace for training (CEDEFOP 2002). This strategy meets specific training needs in a flexible way in European small businesses, which are defined as having fewer than 50 employees, but is less likely to be possible with Australian small businesses with fewer than 20 employees.

The long-term impact of strategies

We did not find any long-term impact studies to help us decide which of the strategies might have a lasting effect on education and training in the participants' businesses or whether the strategy was sustainable (in particular, without substantial government funding). In fact, the majority of programs evaluated were labelled as 'pilot' programs, suggesting that the strategy was being tested or government funding was being used to stimulate small business skills-development activities and innovative approaches. There appears to be a lack of 'empirical assessment of the impact of' training on business performance, as noted in the Organisation for Economic Co-operation and Development (OECD) report, *Management training in SMEs* (OECD 2002b).

When government funding supports a pilot program or strategy in the short term, it is more likely that evaluation will be a one-off study conducted at one point in time, although some short-term impact evidence was supplied by the year 2 evaluation of the Pilot Small Firm Development Account program by Hirst, Lefaucheux and Rinne (2005 [core]). However, only those businesses that continued with training in the second year were followed. This study noted that some small businesses which did not continue in the second year stated that they 'could not absorb more training'. This may mean that they did not see the training-plan approach as meeting their needs or, alternatively, they had got what they needed at that time. Hence, it is likely that impact studies will need to be conducted for much longer than one year after the intervention to assess the impact on small business learning practices and the sustainability of the strategy.

Funding short-term strategies or working on such programs makes it difficult to justify in-depth and longitudinal evaluations or long-term impact studies. However, that is exactly what policy-makers and managers increasingly need: streams of evaluation information, not discrete and episodic evaluations, to understand whether funding is meeting small business needs and improving business performance in the areas where the strategies are expected to have an impact.

In summary

This review highlights three essential elements of successful strategies for achieving small business participation in education and training. These are:

✧ a clear focus on business-specific needs

✧ a personal approach through a recognised local facilitator or business service organisation that is able to reach small business operators who may not be positive about training

✧ flexible provision which carefully individualises training information, content and delivery to the needs of each small business.

Strategies which fit with the way small business learns are clearly more successful than direct or formal training. Small business managers and employees learn experientially by focusing on current issues in their workplace and utilising other business people through social and business networks. Networking opportunities also provide time away from the business for critical reflection of their assumptions, knowledge and experiences.

Small business prefers informal, in-house learning approaches, but they can learn from the formal training system and develop more planned and systematic practices to training and learning in the workplace. Similarly, VET can learn from the informal learning approaches used by small business to improve its flexibility in meeting the needs of small business.

Successful strategies are business mentoring, networking, and collaborative or group learning with other businesses through clusters, alliances or action learning. Other effective strategies include diagnostic services such as training needs analysis, and benchmarking processes against other organisations. Programs which employ a number of these work better than those relying on a single approach.

The evidence provided by the studies shows that successful strategies involve:

✧ opportunities to share skills, knowledge and experience with other business people

✧ training linked to improved business performance—increased profit, growth or survival

✧ reduced cost of training by collaboration with other businesses or through financial incentives, such as a government subsidy or 'interest free' loan

✧ information, education and training targeted to the needs of small businesses at different stages of the business cycle, that is, start-up, crisis and survival, growth and export phases

✧ promotion designed to reach small business managers who may not be positive about training

✧ a personal approach to assist small business managers to analyse their business needs

✧ the involvement of business service organisations or training advisors who are able to provide ongoing support to these small business managers to assist them in addressing their future needs

✧ a joint approach to planning the strategy and training involving small businesses and business service organisations

✧ flexible approaches which minimise time away from the workplace, involve formal and informal learning, and link formal training with informal learning processes in the workplace

✧ an environment in which all participants feel comfortable and where adult education principles are used—informal, interactive and building on experience and knowledge of participants

✧ facilitators and trainers with the appropriate networks and experience to enable them to be trusted and respected by all business participants, especially by Indigenous Australian small business operators.

We did not find long-term impact studies to help us decide which of the strategies had a lasting effect on education and training in the participants' businesses or whether the strategy was sustainable (in particular, without substantial government funding).

Final comments

Limited evaluation studies

While there have been many programs aimed at skills development for small businesses (Department of Industry, Tourism and Resources 2004; AusIndustry 2006; Small Business Development Corporation Western Australia; Queensland Department of State Development and Trade), we found a dearth of independent evaluations of recent small business skills-development programs. In fact, the only hard evidence from an Australian evaluation comes from Kearney's evaluation reports (1999 [core], 2000 [core]) of the Australian Small Business Professional Development Programme, which included the results of a longitudinal evaluation of the projects from the three years that it ran.

Without rigorous evaluations focused on the impact of intervention strategies on business practice, it is virtually impossible to distil 'what works' for small business. There is another advantage also from extensive evaluations—the build-up of detailed case studies, including both successful and unsuccessful experiences, of real businesses. These could well become a useful resource for those marketing specific programs to use with managers who may not be positive about training.

Further research

While we have covered a wide range of material in this review, there remain a number of areas about which we know very little. Notable is the impact of training supplied through equipment and software vendors or suppliers, or that given to franchisees. Other potential areas for further work are the specific training needs of family-owned and operated businesses, owner–operators and micro-businesses with fewer than five employees.

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Appendix 1: Acknowledgements

We acknowledge the contributions from members of the steering group and other members of the project team, reviewers and consultation group. We thank them for their endeavours in assisting with this systematic review of existing research.

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Appendix 2: Framework for systematic review—small business

Framework for the systematic review of research: Small business and VET

Introduction

The aim of a systematic review is to develop a concise summary of the best available evidence that addresses a clearly defined question in a particular area of interest. Therefore, the review question must have a sufficient, but not unmanageable, quantity of primary research informing it.

In undertaking this review, NCVER is seeking a highly interactive relationship with Australian, state and territory policy-makers, and VET researchers. Consultation will ensure that this Australian VET systematic review of research has current relevance to policy and decision-makers. A list of the steering group members and reviewers is provided at the end of this framework document.

Framework

The framework for an NCVER systematic review of research[1] includes:

✧ the question to be addressed by the review

✧ the definitions of the terms in the question

✧ the details for the comprehensive search strategy to identify research studies

✧ the criteria to be used to screen for all research studies relevant to the question

✧ the criteria for appraising the quality of the research studies to be included in the review

✧ the method of synthesising the findings from the included research studies.

The review question

The review question should be specific and focused, and address the *population* or participants of interest, *intervention* for investigation or phenomenon of interest, and the *outcomes* considered most important for assessing the results and, if focusing on effectiveness, usually including a comparison. This provides the basis for development of the research selection criteria without which there is the opportunity for bias, consciously or unconsciously, by reviewers.

One of the 2004 national research priorities related to Objective 2 of the National Strategy for VET 2004–2010, *Shaping our future*, was the question: *How can good practice in engaging small and medium enterprise in VET be replicated?* It was decided by NCVER that a systematic review of research would be useful in this general area.

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[1] Further details of the review process may be found in the NCVER publication by Anlezark, Dawe & Hayman (2005), available from NCVER website < http://www.ncver.edu.au/publications/1575.html>.

The steering group has met and considered the population, intervention and outcomes of interest on the basis of which NCVER has developed the following question:

> What intervention strategies achieve the participation of small business managers and their employees in education and training that meets the needs of small business?

Thus, small businesses, including owners, managers and employees, are the population of interest. 'Participation in education and training that meets the needs of small business' is the outcome, sought, and the strategies that achieve this outcome are the interventions of interest.

It was noted that most small businesses do not engage in accredited VET. This may be because of their perception that accredited VET training does not meet their needs or because they are unaware that accredited VET may be customised to meet their needs. Some small business owners–managers do not see any benefit to the business from education and training.

Research findings considered in the development of the outcomes statement include the following.

◇ There was a great deal of learning and training undertaken within small businesses but it usually involved more informal training, such as short courses, equipment vendor training or learning through business networks, rather than accredited training towards vocational education and training qualifications.[2]

◇ The most important factor in the failure of small businesses is the lack of management expertise.[3]

◇ Small business employers have indicated that they need more customised training, and on-site or on-the-job training delivery is preferred as they cannot afford staff time out of the workplace during working hours. Employer surveys continue to note that small business operators lack awareness of the national training packages and options available to customise training and delivery to meet their needs.

The definitions of terms

As defined by the steering group, the terms in the review question are as follows:

Small business

The starting brief contained the term 'small business', and after discussion by the steering group it was agreed to use the Australian Bureau of Statistics (ABS) definition:

> Small businesses are defined as businesses employing less than 20 people in all industries except agriculture where the definition is businesses with an estimated value of agricultural operations (EVAO) of between $22,500 and $400,000.[4]

However, the lack of a uniform definition suggests that we should not slavishly follow this definition. For example, previously the ABS defined manufacturing businesses as 'small' if they had fewer than 100 employees.[5] Therefore we will include research studies using the current ABS definition above, and that previously used by ABS for small manufacturing businesses. Size definitions for small business may vary in overseas countries, for example, in the United States fewer than 200 employees defines small manufacturing businesses, and so international research using a range of definitions will also be considered.

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[2] Gibb, J 1998, 'The relevance of a training culture to small business in Australia' in *Creating our future: A new training culture for Australia*, collected papers from ANTA's conference in *Lifelong learning: Developing a training culture*, eds C Robinson & K Arthy, pp.39–61, NCVER, Adelaide.

[3] Dun & Bradstreet 1994, Business Failure Record, Dun & Bradstreet, New York.

[4] ABS 2002, *Small business in Australia 2001*, cat. no.1321.0, ABS, Canberra.

[5] ABS 1995, *Small business in Australia 1994*, cat. no.1321.0, ABS, Canberra.

The steering group agreed that small business was not a homogenous group and implied in the review question was the diversity of small businesses. This diversity would need to be reflected in the research findings and final report, that is, what it takes, for which types of small businesses, and when.

In general, small businesses have the following characteristics.

✧ They are independently owned and operated.

✧ They are closely controlled by owners–managers.

✧ Decision-making is principally done by the owners–managers.

✧ The owners–managers contribute most if not all of the operating capital.[6]

The ABS categories of small businesses that will be included in this review are:

✧ non-employing businesses—sole proprietorships and partnerships without employees (people who work in these businesses are referred to as 'own account workers' by ABS)

✧ micro businesses—businesses employing fewer than five people, including non-employing businesses

✧ other small businesses—businesses employing five or more people, but less than 20 people.

Outcome—Participation in education and training that meets the needs of small business

The steering group agreed that the outcome should be 'participation in education and training that meets the needs of small business'. Hence, the review would synthesise findings about 'interventions' which achieve this outcome. There are two main dimensions to this outcome: a *participation* dimension, requiring that small business managers understand the importance and value of education and training, and are willing to invest in it; and a *satisfaction* dimension, requiring that the education and training provided is seen as relevant, useful and cost-effective. Clearly, it is possible to achieve the first element of the outcome (participation) without achieving the second (satisfaction), but it is the intention of this review to find evidence for what strategies enable the two dimensions to be met.

The steering group agreed that both *informal and formal education and training* should be included but it must be that 'which meets the needs of small business'. This includes *unstructured* (informal) learning activities such as self-directed learning, networking, coaching or mentoring, so long as it is knowingly participated in, such as a business forum or network. It also includes *structured* (formal) learning activities such as undertaking an accredited or non-accredited course, of any duration (short-term and long-term), in any mode (on-the-job training, off-the-job training, e-learning, apprenticeships or traineeships), in any field of study (including industry-specific, management, information technology, taxation or other government regulations), and delivered by any provider (for example, peer learning or business networks, training consultants, equipment vendors, industry or professional associations, schools, TAFE, higher education or private providers). Education and training that meets the needs of small business may involve:

✧ engagement of trainers with managers and staff to understand their needs

✧ specific training needs analysis or recognition of prior learning to ensure training 'fills the gaps'

✧ 'just in time' or fit-for-purpose training

✧ 'up-to-date' training in relevant new technology or industry practices

✧ training in relation to potential new markets or products for example, cross-industry awareness training.

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[6] *Small business in Australia: Challenges, problems and opportunities*, a 1990 report to the House of Representatives Standing Committee on Industry, Science and Technology, AGPS, Canberra.

To measure achievement of interventions, outcome measures are required. These may be included in an evaluation of the intervention strategy used to increase participation of small business owners, managers and employees in education and training through measurement of small business and are:

✧ satisfaction with education or training in which they have participated

✧ return on investment in education and training

✧ growth.

There are some evaluations of government incentive schemes, such as Commonwealth administered FarmBiz Scheme, Small Business Smart Business in Western Australia and Training bonus scheme in New South Wales. However, the steering group realises that the review may confirm a research gap in this area.

Intervention strategies

The interventions of interest are those which achieve the desired outcome. Possible intervention strategies may include practices or programs that:

✧ promote awareness of the benefits of further education and training for small business managers and their staff

✧ provide access to clear, simple information and delivery of education and training

✧ provide incentives for education and training

✧ promote training by equipment vendors as 'after sales' benefits

✧ promote partnerships between small business and training providers.

Research selection criteria

The search strategy will involve hand and electronic searching to select research studies that meet the inclusion criteria, that is:

✧ are in English, from Australia and overseas

✧ date from 1996 onwards.

Search strategy for identification of studies

A coherent search strategy is required to identify all potentially relevant studies to the review. The search strategy is recorded in detail so that the process is transparent and replicable.

The search strategy will involve hand and electronic searching (databases, websites and journals and unpublished reports, dissertations or projects in progress as listed in appendix A). It will involve the matching of keywords deemed relevant to the review question (see appendix B).

The date for this search will be January 2006.

Screening for all studies relevant to the review

The search results are screened through an iterative process. Based on the information provided in the title and abstract, all studies identified will be assessed initially by the searchers for relevance to the review question. All studies will be recorded in the search log with reasons for exclusion noted (see appendix C, table A2).

Searchers will include all material within scope, that is, meets the population, intervention and outcome definitions.

All relevant studies listed by the searchers will undergo a further screening process by the key reviewers who will apply the selection criteria (see appendix C, table A1) more strictly. Since abstracts may not be sufficient to make the final selection of relevant studies, the full reports or articles of those considered relevant will be scrutinised by the review team. During this scrutiny, bibliographies and reference lists will be checked for other relevant studies not already found. In addition, any recommendations of published, unpublished or in progress research notified to the project leader will be added to the list and scrutinised by the review team.

Selecting the studies to be included—appraising the quality

All research studies meeting the relevance criteria will be appraised for quality by the reviewers. The quality criteria (see appendix D) were developed by the Joanna Briggs Institute (JBI)[7] whose systematic review management software NCVER is using for this review. The JBI quality criteria coincide well with the quality criteria NCVER used in its first systematic review of research.

The reviewers have been selected for their research knowledge and experience and so, using the quality criteria and their professional judgement, they will ascertain whether the study is of sufficient quality to be included in the review. At least two reviewers will independently read and appraise each relevant report or article. Using a collaborative approach, the review team will discuss the appraisals to reach consensus on the final studies to be included in the review. In this way, an 'A' list of the most relevant and quality research studies will be selected for inclusion in the review. The 'B' list will include those studies considered but excluded from the in-depth review for reasons that will be documented (including that the reviewers judged the study to be of insufficient quality to provide reliable evidence to answer the review question). Both lists will be circulated to the steering group and consultation group for comment and further consideration, if necessary, by the review team.

Synthesis of findings

Findings and evidence extraction from included studies

Once the review team has agreed that the study will be included, the JBI Qualitative Extraction Instrument will be used (see appendix C) to record detailed information about the study. The findings in the study which are relevant to the set question are recorded along with the best evidence quoted from the report to support that specific finding. These are recorded by the reviewer in consultation with one or more other members of the review team.

Synthesis of findings

The findings will be meta-synthesised into a narrative summary or summary tables. For this review, the JBI-QARI software (see appendix E) will be used as the database to pool the evidence found to answer the review question. The aim of meta-synthesis is to assemble findings, categorise these findings into groups on the basis of *similarity in meaning*, and to aggregate these into a general set of statements that adequately represent that aggregation. These statements are referred to as *synthesised findings* by the Joanna Briggs Institute software manual and they can be used as the basis for evidence-based policy and practice. They may be compared with the 'key messages' in NCVER standard reports.

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[7] The Joanna Briggs Institute (JBI) is an international research and development agency based in Adelaide, and is an affiliated research centre of the University of Adelaide and the Royal Adelaide Hospital.

Reporting

The final report in the NCVER standard report format (key messages: one page; executive summary: three pages; and findings: 25 pages), will try to answer the review question by detailing the evidence on intervention strategies that achieve the participation of small business managers and employees in education and training that meets their needs. Where possible, it will state explicitly what intervention strategies (programs or practices) work, for which group of small businesses, and when in the life cycle of the business or under which circumstances. Also to be reported will be factors that have an important bearing on the key outcome of participation in education and training that meets the needs of small business, and the implications for policy, practice and research from these findings.

Supporting documents will detail the studies found in the initial search, the number of studies excluded, and reasons for exclusion.

The systematic review steering group

Steering group personnel*	
Tom Karmel, Chair	Managing Director, NCVER, Adelaide
Patricia Neden	Deputy Secretary, OTTE, Melbourne
Michael Stevens	Deputy Secretary (VET Strategies), OPCET, Hobart
Rebecca Cross	Branch Manager, Quality and Access Branch, DEST, Canberra
Beth Walker	Director, Small Business Research Centre, Edith Cowan University, Perth
Stella Axarlis	Director, Stella Axarlis and Associates Pty Ltd, Melbourne

Note: *   A representative of the Office of Small Business, Department of Industry Tourism and Resources, Canberra, also attended the steering group meeting.

NCVER project personnel	
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Susan Dawe	Senior Research Fellow, NCVER (project leader/primary reviewer)
Nhi Nguyen	Research Officer, NCVER (internal reviewer)

| Proposed reviewers external to NCVER	
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Richard Elvins	Elvins Consulting Pty, Ltd, Melbourne
Jane Figgis	AAAJ Consulting Group, Perth
Jane Schueler	Consultant VET researcher; Director, Techstyle Mondial, Adelaide

Background

Figure A1 Summary of the steps of a systematic review

Iterative process		
1 Identify the question		
2 Develop a framework for the review	→	*Approval*
3 Search for all relevant research		
4 Select studies to be included	→	*Report*
5 Appraise selected studies		
6 Synthesise the appraised work to answer the question		
7 Present findings to stakeholders	→	*Report*
8 Disseminate the results		
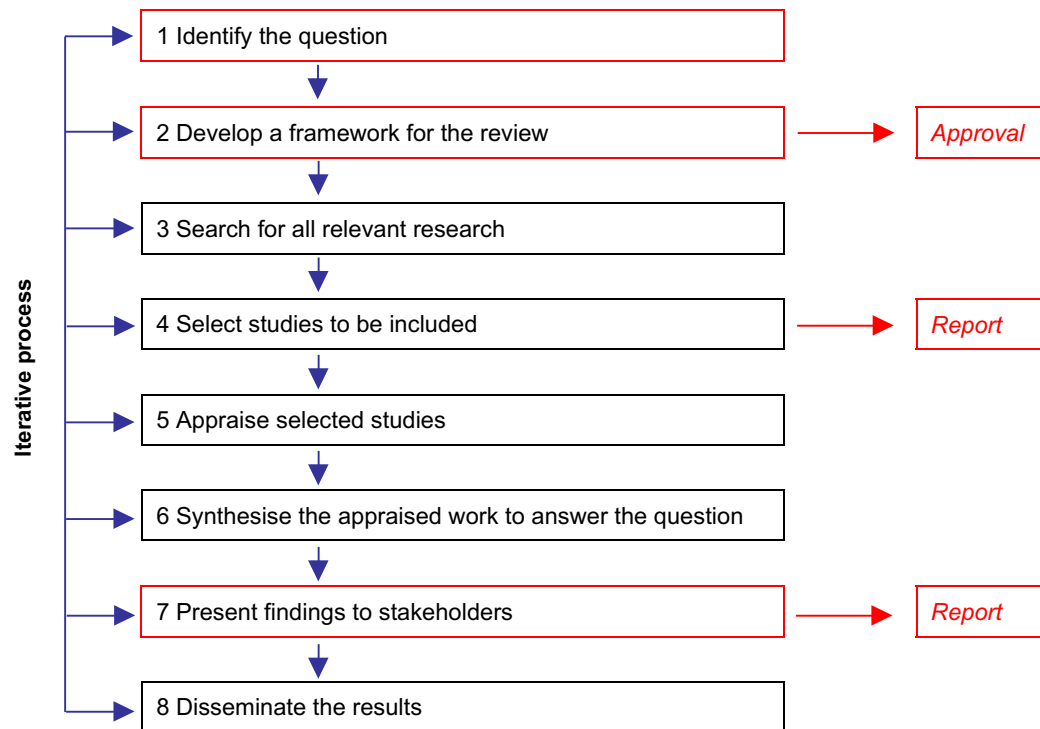
Source: Anlezark, Dawe & Hayman (2005)

Appendix A: Proposed resources to be used in the search

Electronic online databases searched

Various business-oriented databases to be identified and searched via IlanetWeb
<http://www.ilanet.net.au>
Social SciSearch (via database vendor—Dialog)
Education Abstracts (via database vendor—Dialog)
ERIC (via database vendor—Dialog)
EconLit (via database vendor—Dialog)
Australian Education Index (AEI) cdrom + online via Informit Online
British Education Index (BEI) cdrom
Proquest <http://0-proquest.umi.com.library.ecu.edu.au/pqdweb?ReqType=301&UserId=
IPAuto&Passwd=IPAuto&JSEnabled=1&TS=917841377>

Web-based databases searched

VOCED (Vocational Education and Training Research Database) <http://www.voced.edu.au>
EconPapers Online <http://econpapers.hhs.se>
Educational Research Abstracts (ERA) online <http://www.tandf.co.uk/era>
CEDEFOP Electronic Training Village—VETBib
<http://www.trainingvillage.gr/etv/Information_resources/Library/default.asp>
Business source premier on EBSCOhost

Web search engines used

Google <http://www.google.com.au>
Google Scholar: scholar.google.com
Expanded academic ASAP®
CSA <http://www.csa.com>
Yahoo Search Subscriptions <http://search.yahoo.com/subscriptions>
Dogpile <http://vivisimo.com>
Clusty <http://www.clusty.com>
<http://www.training.com.au>

Websites viewed

AusIndustry <http://www.ausindustry.gov.au>
Australian Bureau of Statistics <http://www.abs.gov.au>
Australian Business Limited <http://www.australianbusiness.com.au>
Federation of Small Business <http://www.fsb.org.uk>
Business.gov.au <http://www.business.gov.au>
Swinburne University, Library, Infogates, Small Business <http://www.swin.edu.au/lib/
infogate/smallbus.htm>
Office of Advocacy, US Small Business Administration, Economic Statistics and Research
<http://www.sba.gov/advo/research>
Small Business.com.au <http://www.smallbusiness.com.au>
Small Business:Apprentice and Trainee selection: smart business strategy
<http://www.ette.vic.gov.au/apprenticeships/smallbusiness/introduction.htm>
Small Business Enterprise Culture Program (SBECP) <http://www.ausindustry.gov.au/content/
level3index.cfm?ObjectID=2C93CBD2-E994-4BA5-B6DDC014654EE78E&L2Parent=
AEB901E5-7CB8-4143-A3BF33B2423F9DA6>
Small Business Research <http://www.smallbusinessresearch.com.au>
Small Business Research and Policy (Canada) <http://strategis.ic.gc.ca/epic/internet/insbrp-
rppe.nsf/en/Home>
Small Business Research Centre (Kingston University, London) <http://business.king.ac.uk/
research/sbrc/smbusres.html>
Small Business Research Portal <http://www.smallbusinessportal.co.uk/index.php>

Small Enterprise Association of Australia & New Zealand <http://www.seaanz.asn.au>
CPA Australia <http://www.cpaaustralia.com.au>
Warwick University <Http://www.wbs.ac.uk/group/csme>
Durham University Business School <http://www.dur.ac.uk/dbs>
Australian Graduate School of Management <http://www2.agsm.edu.au/agsm/web.nsf/
Content/Home>
Australian Graduate School of Management, Frank Lowy Library <http://www2.agsm.edu.au/
agsm/web.nsf/Content/InformationServices>
Australian University Business Schools (provides links to all universities with business schools)
<http://www.lexisnexis.com.au/aus/academic/lawlinks/business.asp>
Harvard Business School <http://www.hbs.edu>
Harvard Business School, Baker Library <http://www.library.hbs.edu>
Columbia Business School <http://www0.gsb.columbia.edu>
Stanford Graduate School of Business <http://www.gsb.stanford.edu>
London Business School <http://www.london.edu>
Kellogg School of Management, Graduate Business School, Northwestern University
<http://www.kellogg.northwestern.edu/index.htm>
International Vocational Education and Training Association
Cambridge Network Business Services <http://www.cambridgenetwork.co.uk/bfora/systems/
xmlviewer/default.asp?arg=DS_CN_COMP_33/_list.xsl/41>
Northern Territory Department Business, Economic and Regional Development website:
<http://www.nt.gov.au:8501/dberd/dberd/index.cfm>
Allan Gibb's website <http://www.allangibb.com/publications.htm>
Competency-based Economies through Formation of Enterprise <http://www.cefe.net>

Global Entrepreneurship Monitor
Australian website <http://www.swin.edu.au/agse/research/gem.htm>
International website <http://www.gemconsortium.org>

Social Entrepreneurship
NZ <http://www.jobsletter.org.nz>
ACOSS including Australian Community Sector Surveys and membership
services <http://www.acoss.org.au>
SACOSS Blueprint and Reports <http://www.sacoss.org.au/blueprint.htm>
<http://www.sacoss.org.au/pubs/index.html#reports>

Flexible Learning-e-Learning
<http://www.flexibleelearning.net.au>
<http://edna/edu.au>

Enterprise Education
Schools sector <http://www.dest.gov.au/Ministers/Media/Nelson/2005/07/n1139120705.asp>
VET sector <http://flexiblelearning.net.au/projects/>
Port-Ability <http://flexiblelearning.net.au/projects/portability.htm>
New Practices 2005 <http://www.flexiblelearning.net.au/projects/newpractices2005.htm>

Higher Education sector/research
CEMI—The Centre for Entrepreneurial Management and Innovation
<http://www.cemi.gsm.uwa.edu.au>

Small Business related
Small Business Development Conference <http://www.sbdc.org.au/index.php?module=
Website&action=Home&content=home>
Council of Small Business Organisations <http://www.cosboa.org>
Family Business Australia <http://www.fambiz.com.au>
Business Swap International <http://www.swapaustralia.com.au>
VIVA SA projects including angel mentors & investors <http://www.vivasa.com.au/projects-
angel-investors.asp>

NSW <http://www.business.nsw.gov.au/help.asp?cid=175&subCid=179>
Western Australia <http://www.wabusinessnews.com.au/bookoflists1.php>

Journals
University of Adelaide Library Business Journal subscriptions list
<http://www.library.adelaide.edu.au/guide/eco/bus/busjnlsubs.html>
Asia Pacific Journal of Human Resources
British Journal of Industrial Relations
British Journal of Management
Economic Journal
Entrepreneurship Theory and Practice
European Journal of Industrial Relations
European Journal of Small Business
Human Relations
International Journal of Entrepreneurial Behaviour and Research
International Journal of Human Resource Management
International Small Business Journal
International Studies of Management and Organization
Journal of European Industrial Training
Journal of General Management
Journal of Human Resources
Journal of Management Studies
Journal of Small Business and Entrepreneurship
Journal of Management Studies
Journal of Labor Research
Journal of Public Economics
Oxford Bulletin of Economics and Statistics
Small Business Economics

Appendix B: Proposed key search terms

Population

small business / small businesses / small and medium enterprise / small-medium / SME / SMEs / smaller business / self employment / self employed / informal sector / public sector / private enterprise / public enterprise / enterprise /small company / small companies / micro business / small and medium business / small business operator / small firm / small firms / smaller firms / small enterprise / family business / small employer / owner-manager / proprietor-manager / self-employed subcontractor / self-employed subcontractors / entrepreneurs / entrepreneurship / home based business / family owned business / sole practitioner

Intervention

training bonus / training guarantee / incentive schemes / inducements / business network / business networks / industry associations / intervention / interventions / tax incentive / financial aid / financing / educational finance / training allowance / training guarantee / voucher / training levy / public funding / private funding / finance / innovation / innovative / entrepreneurial / entrepreneurial capacity / export club / business club / business forum / recognition of excellence for example, manufacturer of the year / industry awards / employer awards / employee awards / trainee award / training awards / field officers / vendor training / motivation / motivators / facilitators / government regulation / clusters / incubators / skillecosystem / skill ecosystem / competitiveness / regions / regional networks / licensing / licences / fostering business / collaboration / knowledge brokerage / brokers / advisors / suppliers / business-to-business networking / interfirm / inter-firm / interfirm cooperation / interfirm linkages

Outcomes

participation / participation rates / training / education / learning / learning activity / learnt / general education / vocational training / vocational education / continuing education / continuing vocational education / continuing vocational education / adult learning / adult education / adult programs / adult vocational education / lifelong learning / retraining / refresher training / job skills / job development / job training / skill development / skill upgrading / skills / accredited training / accredited courses / unaccredited training / unaccredited courses / non-accredited / self-directed learning / formal learning / networking / coaching / mentoring / human capital / training investment / return on investment in training / training within industry / industry training /skill development activity / customised training / peer learning / short course / short duration / informal learning / management courses / financial management / recognition of prior learning / RPL / recognition of current competencies / RCC / training needs / training needs analysis / traineeships / apprenticeships / training existing workers / continuous learning / evaluation / satisfaction

Appendix C: Selection criteria

Table A1 Criteria used to select studies for the systematic review

Item	Criteria
Language and geographical limits	English, from Australia and overseas
Date of research study	Approximately the last 10 years (1996 onwards)
Scope	For a research study to be included, it has to meet the population, and outcome definitions, where population is 'small business', and outcome is 'participation in education and training that meets the needs of small business'. The variable is interventions which achieve this outcome. Possible intervention strategies may be practices or programs that promote among small businesses (i) awareness of the need and benefits of education and training, (ii) clear, simple information and access to education and training, or (iii) deliver education and training determined in conjunction with the manager & staff to meet the needs of the small business.
Key search terms	As listed in appendix B
Key websites	As listed in appendix A
Key databases	As listed in appendix A
Key authors	As listed in appendix A—recommended from consultation group
Key papers/journals	As listed in appendix A—recommended from consultation group
Research in progress or unpublished research	As listed in appendix A—recommended from consultation group

Table A2 Record of studies in the search log

Item	Details
Search information details, including ID and source such as database or website name,	ID unique number for each study found; Database or website name or other information about where or how this study was found.
Bibliographic details, including: ◇ title ◇ author(s) ◇ publication details	Title, author(s), publication date and other relevant bibliographic details and url
Include or exclude	Reason for exclusion

Appendix D: Quality appraisal criteria tool

There are ten questions used by the Joanna Briggs Institute for the trained reviewers to determine whether the quality of the research study and its findings are suitable for inclusion in the systematic review of research. These questions are included in the JBI Qualitative Assessment Review Instrument software (QARI) with four alternative answers—Yes, No, Unclear or Not Applicable

Table A3   Quality appraisal criteria for included studies

Question	Criteria	Assessment
1	Is there congruity* between the stated/implied philosophical perspective and the research methodology?	Yes/no/unclear/NA
2	Is there congruity between the research methodology and the research question or objectives?	Yes/no/unclear/NA
3	Is there congruity between the research methodology and the methods used to collect the data?	Yes/no/unclear/NA
4	Is there congruity between the research methodology and the representation and analysis of data?	Yes/no/unclear/NA
5	Is there congruity between the research methodology and the interpretation of results?**	Yes/no/unclear/NA
6	Is the influence of the researcher on the research and vice versa, addressed?	Yes/no/unclear/NA
7	Is there a statement locating the researcher culturally or theoretically?	Yes/no/unclear/NA
8	Are participants, and their voices, adequately represented?	Yes/no/unclear/NA
9	Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?	Yes/no/unclear/NA
10	Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?	Yes/no/unclear/NA

Overall appraisal: Include   Exclude   Seek further information

Notes: * Congruity is similar to 'consistency', 'a comfortable fit' or 'agreement'.

** In the *NCVER Guidelines for reviewers* this question will include '*Is there congruity between the data and its interpretation?*'

Appendix E: JBI Evidence extraction tools

JBI *Qualitative Extraction Instrument (JBI—QARI software)*

Authors: …………………………………………………… Record number: ………

Report/article: ………………………………………….. Year: ………

Reviewer: …………………………………………………….

Table A4   Details of study

Method
Methodology
Data analysis
Setting & context
Geographical context
Cultural context
Participants/Population:
Number:
Description:
Interventions/strategies:
also any implementation differences
Outcome measures (required for effectiveness measures):

Drawing on the literature and input from a panel of experts, an approach to categorising the validity of qualitative evidence was developed for and incorporated into the JBI-QARI software. This is based on three levels of qualitative evidence: Unequivocal, Credible, Unsupported[8]

Degrees of credibility
Unequivocal: evidence beyond reasonable doubt which may include findings that are matter of fact, directly reported/observed and not open to challenge.
Credible: evidence that is, albeit an interpretation, plausible in the light of the data and theoretical framework. The interpretations can be logically inferred from the data/evidence but, because the findings are essentially interpretative, they can be challenged.
Unsupported: when none of the other level descriptors applies and when, notably, findings are not supported by the data/evidence.

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[8] from the JBI software manual.

Table A5   Details of findings and evidence from study

Findings relevant to the review question only	Narrative description (i.e. best evidence quoted from study—include page number)	Level of evidence or degree of credibility

Authors conclusion (if relevant to the review question)
Reviewers conclusion

Findings synthesis

Findings synthesis of evidence will be performed using the Joanna Briggs Institute Qualitative Assessment review instrument (JBI-QARI) software package. The process of meta-synthesis embodied in these programs involves the aggregation or synthesis of findings/conclusions made in relation to the intervention, activity or phenomenon that is the subject of the review. The aim of the process is to generate a set of statements that represent aggregation through assembling the findings/conclusions on the basis of similarity in meaning. These categories are then subject to meta-synthesis in order to produce a single comprehensive set of synthesised findings that are used as the basis for evidence-based policy and practice.

The JBI-QARI program permits the reviewer to exercise some degree of judgement, as synthesis involves both aggregation of categories and the use of interpretative techniques to summarise the findings of individual studies into a product of practical value. The features of the content analysis incorporated into these programs include the need to read and re-read the text to identify the meaning of the content, and the formation of statements that accurately describe the content.[9]

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[9]   From the Joanna Briggs Institute software manual.

Appendix 3: How included studies meet selection criteria

As a result of the reviewing, 11 studies have been identified as core studies: they meet the criteria for relevance and quality and provide the clearest evidence of interventions strategies to answer our review question. Table A6 summaries the five Australian studies, while table A7 summarises the six United Kingdom studies and how these studies meet the selection criteria for our review question.

The reviewers considered that nine other studies provided supporting evidence, especially for quality planning, promotion and implementation of the intervention strategies that work for small business. As shown in table 1 in chapter 1 of this report, three of these studies (261, 693 and 701) were considered by the reviewers to be highly relevant but of medium quality to answer the review question. These three studies which directly relate to intervention strategies identified in the core studies are summarised in table A8.

The other six studies were of medium relevance, but of high quality for providing reliable supporting evidence for the planning, promotion and implementation of successful intervention strategies to meet the needs of small business. Table A9 summaries the supporting studies and how they meet the selection criteria for our review question.

Table A6   Summary of included Australian evaluation studies

Study ID & date, title & author/s of publication	Population sample	Research methods	Participation including business need or reason for participating	Meeting the need(s) of small business—direct or implied satisfaction
ID 226 2002 *Small Business Smart Business Get Smart—Get into training: Final report & evaluation* Author: Dufty	Small business with fewer than 20 employees in Western Australia 1064 respondents; 35% response rate (BECs issued 6987 vouchers, so we assume 3040 sample used).	Survey of small businesses that used $200 training voucher for training as approved by the local BEC—27 regional & 10 metropolitan Also survey of training providers (185 respondents) & BECs (36 out of 37 responded)	All participants undertook training; the majority of participants undertook training in computing and information technology; 73% of all training was undertaken by the small business owner and less than half of the owner/operators (48%) said they had previously undertaken training.	Over 75% of respondents indicated that the training met their needs in terms of content, timing, location and cost. 96% indicated that they would undertake further training for themselves or their staff.
ID 731 2004 *Small Business Smart Business: Report* Authors: Walker & Webster	Small business with 2–20 staff in all regions of Western Australia 884 respondents from stratified sample of 2500—35% response rate	Survey of stratified sample of 2500 small businesses which used $200 training voucher out of 16 825 participants over 4 years from 2000–03. Training that improves business productivity as approved by the local BEC—27 regional & 10 metropolitan	All participants undertook training; only 51% had paid for training prior to the voucher system so it had increased participation. The most popular area of training undertaken involved computer programs (33%) and computer skills (20%).	62% stated that productivity had improved, 48% agreed that profits had increased, 53% that training had a positive effect on staff satisfaction and 70% that they had better management skills.

Study ID & date, title & author/s of publication	Population sample	Research methods	Participation including business need or reason for participating	Meeting the need(s) of small business—direct or implied satisfaction
ID 715 1999 *Business mentors: supporting small business in Tasmania and on the Central Coast of NSW: A report* Author: Dusseldorp Skills Forum	Small business managers who sought help from local small business mentoring program. Tasmania has had 900 clients since 1995; 235 clients in NSW since 1997.	Survey and interviews with selected mentorees, mentors and two program coordinators. 30 clients (27% response rate) responded to a survey sent to a sample of 112 clients (82 clients in NSW and 30 clients in Tasmania). Client's perspective reported in 5 case studies and mentor's perspective in 4 case studies	All respondents were participants; 60% of survey respondents rated themselves as 'struggling to survive' and 40% as looking to expand their business when they contacted the Business Mentor Program.	Of the 18 'strugglers', 50% felt that their objectives had been met by the program and 17% felt that their objectives had not been met. Of the 12 'expanders', 41% felt that they had achieved the objectives set with their mentors and 25% reported that the program was unable to meet their needs.
ID133 2000 *Size matters: National summative evaluation report of the Small Business Professional Development Best Practice Programme 1996–2000* Author: Kearney	Small business with fewer than 20 employers in all states and ACT Longitudinal evaluation: 200 small businesses were sampled: 50 telephone interviews from 1997 program, 100 from 1998 and 50 questionnaires from 1999. Total number of participants was 2257 i.e. 555 in 1997, 847 in 1998 & 855 in 1999 (most participants were owners or managers but number of businesses would be fewer than 2257).	Qualitative & quantitative data gathered directly & indirectly by the National Evaluator over 4 years. Included entry & exit surveys and interviews of participants, project managers; analysis of reports from project managers, SBPD program managers, state coordinators, field evaluators, state and territory training agencies and SBPD Programme managing agent and of business plans and researchers' documents. Analysis of 30 1999 project reports, state coordinator reports and state evaluation reports and case studies.	All respondents participated in SBPD projects. 24 projects in 1997 raised awareness of value of training. 25 projects in 1998 include mentoring, clustering, networks, action learning, needs analysis and orientation tools, benchmarking and sessional delivery. 30 projects in 1999 focused on sustainable solutions and transferability through new intermediaries and important new areas: e-commerce, Indigenous businesses & sole operators.	Longitudinal study: 66% improved economic bottom line, sales/turnover & profits; 78% increased chances of survival; 88% improved ability to run business; 28.5% had taken on more staff or increased hours of existing staff; 52% had undertaken more training; 91% were more appreciative of the benefits of training; 81% were more likely to spend more time and resources on training in the future; 70% say future training will be well planned; 40% have already allocated resources to future training.
ID133a 1999 *Big pictures from the small end of town: 1998 Small Business Professional Development Programme evaluation report* Author: Kearney	Small business with fewer than 20 employers in all states and ACT. 1998: 25 projects: case study reports Results of longitudinal study in 1999	Qualitative and quantitative data gathered directly & indirectly by the National Evaluator. Analysis of reports from project managers, SBPD program managers, state coordinators. Entry & exit surveys of 1998 project participants and longitudinal evaluation interviews with 50 participants six months after exit from 1997 projects.	All respondents participated. 25 projects in 1998 include mentoring, clustering, networks, action learning, needs analysis and orientation tools, benchmarking and sessional delivery. Mentoring was very much in vogue; clusters and networks need meaningful activity; small business needs ongoing support with facilitators providing site visits.	In the 1998 exit surveys, 90% had increased their appreciation of the value of training for their businesses; 62% would increase in-house training as a result; half had already increased training effort; 30% had committed resources to increasing training effort and 38% had set up workplace systems to support training efforts. 1998 longitudinal evaluation—50% of participants improved skills personally; 75% increased understanding of options available, 80% increased appreciation of value of training and learning for the job/business; 49% increased willingness to pay for training.

Note: SBPD = Small Business Professional Development; BEC = Business enterprise centre.

Table A7   Summary of included United Kingdom evaluation studies

Study ID & date, title & author/s of publication	Population sample	Research methods	Participation including business need or reason for participating	Meeting the need(s)of small business—direct or implied satisfaction
ID 236 2003 *Evaluation of the Pilot Small Firm Development Account* Authors: Hirst, Lefauchaux & Rinne	150 out of 346 participating small firms (4–49 employees) in 4 English counties: Derbyshire, Leicestershire, Lincolnshire and Nottinghamshire	Telephone interviews of 'training champions' in 150 out of 346 small firms with fewer than 50 employees (5–10 staff, 34%; 11–20, 26%; 21–30, 21%; & 31–49, 18). Postal survey of 177 learners Case studies of 15 firms; comparative data analysis of company characteristics; face-to-face interviews with stakeholders	Participation by 346 small firms in training designed & delivered by Centre for Enterprise through local Business Link Workforce Development Teams who recruited firms; open access but a good range of companies of different sizes and from different sectors participated.	89% of participants noted increased knowledge and skills for their job. 71% of firms had delivered (or will deliver) all the training in the plan; 75% indicated they intend to use the training plan in future; 71% said that they will maintain the 'training champion' role.
ID 260 2005 *Evaluation of the Pilot Small Firm Development Account Year 2* Authors: Hirst, Lefauchaux & Rinne	Small firms (4–49 employees) in 4 English counties: Derbyshire, Leicestershire, Lincolnshire and Nottinghamshire 217 (of 313 firms who completed year 1) signed on for year 2. Details of sample selection not given, but 90 companies out of 217 plus 25 out of 96 who did not extend.	Telephone survey of two cohorts: 25 companies that did not register for year 2 (out of 96); and 90 companies out of 217 who submitted year 2 training plans. Case studies of 18 companies based on face-to-face interviews	Almost 70% of the year 1 firms took up the offer of year 2. About half of these firms took up management & leadership training to train new managers or address specific business needs; about one-quarter took up year 2 to make use of available funding. About a third of firms surveyed participated in at least some of Business Link's networking events which were designed to promote Investors in People.	Training plans in year 2 had an improved focus on business needs and greater selectivity in which staff were trained and what type of training they received. 69% of firms would participate in SFDA for a third year even if there were no government funding: the vast majority of these would continue to go to Business Links for support.
ID 094 1999 *Evaluation of the Small Firms Training Loans Scheme* Author: Maton	Small firms with fewer than 50 employees in the United Kingdom who found out about scheme through TEC in first year or approached participating banks	298 small firms who took a training loan surveyed by telephone (98 responded; 21% no longer trading or phone dead) plus in-depth interviews for 40 largest loan holders Analysis of administration data for 346 loans. Note: half of the loans supplied by Barclays Bank which also offered 'cash back' promotion.	62% of all Small Firms Training Loans Scheme were taken up by micro-businesses (with 5 or fewer employees), most were less than 3 years old & mostly accounting, legal services, market research, management consultancy and computer-related firms; computer software training was most popular.	Main attraction was the 'repayment holiday' to overcome cash flow problems. 71% of firms (of 92 in survey) said that their business aims were met in full through the training funded by Small Firms Training Loans Scheme (the main aim was seen as increasing productivity through skills improvement).
ID 035 1997 *TECs and small firms training: Lessons from Skills for Small Business* Author: GHK Economics & Management	Sample of 147 small firms with fewer than 50 employees who received Skills for Small Business support through 10 selected TECs	Survey and interviews: Sample A = 97 firms from the first round who had completed the training 12–18 months before and a sample B = 50 firms which had just started the second round at the time of the base-line interview and re-interviewed six months later when most had just completed key worker training. Verification interviews with 5 TECs and 10 small firms; each TEC a case study	Participating firms included those with positive attitude to training or who had not really come to terms with training or wanted advice and support; the majority had not received any previous assistance from TECs.	From the raw data, approximately 70% cited improved staff skills, improved staff understanding, improved quality of training and increased volume of training as benefits of Skills for Small Business.

Study ID & date, title & author/s of publication	Population sample	Research methods	Participation including business need or reason for participating	Meeting the need(s)of small business—direct or implied satisfaction
ID 604 2002 *Engaging SME managers and employees in training: Lessons from an evaluation of the ESF Objective 4 programme in Great Britain* Authors: Devins & Johnson	SMEs employing under 100 employees	Telephone survey of 116 SMEs employing under 100 employees: 46 involved managers and employees; 26 managers only; 44 only employees (Methodology contained in study 734.)	The majority of the participants undertook training in management and information technology.	92.2% of SMEs indicated that the intervention had met their needs. 81.1% indicated that the increase in training in the business was due to O4 training. 76.7% indicated O4 skills were passed onto other employees. 69.8% indicated confidence in the future as an outcome of ESF O4 training.
ID 725 2005 *Talking the right language: Can further education offer support for business innovation* Authors: Hughes & Stanton, Learning & Skills Development Agency	Local businesses around 24 further education colleges in England	Interviews of 140 local, large & small, companies conducted by 'research partners' in 24 further education colleges and case studies of two BIS activities in each FE college	Business Innovation Support (non-training) provided by further education colleges can create & support small business networks for example, Rural Enterprise Network, where businesses of various kinds, including people offering 'bed & breakfast' meet together for mutual support; BIS centre is ready with technical, legal and business-planning advice as required and can provide limited research or consulting services for local businesses.	The BIS services currently offered by further education colleges & used by local small businesses included: knowledge transfer such as digital imaging; technical support, research & advice for small engineering & manufacturing firms; IT-related support; access to design facilities, field testing (for example, animal foods); customer surveys; the production of prototypes; project evaluation for voluntary bodies; environmental monitoring & audits.

Note: SME = small to medium enterprise; O4 = Objective 4; BIS = Business Innovation Support; FE = Further education; SFDA = Small Firms Development Account; TEC = Training enterprise council; ESF = European Social Fund

Table A8   Summary of included supporting intervention studies

Study ID & date, title & author/s of publication	Population sample	Research methods	Participation including business need or reason for participating	Meeting the need(s) of small business—direct or implied satisfaction
ID693 1999 Australia *Women in Small Business Mentoring Program* Author: Holgate	Small business women in Perth, Western Australia; 43 participants (21 mentorees and 22 mentors) Note: The report was written by the coordinator so evidence may be biased towards 'good news'.	Five months after the completion of the six-month program an evaluation workshop was held and those attending completed the questionnaire: 16 mentors and only 9 mentorees	21 mentorees plus 22 mentors participated in 11 fortnightly workshops on topics determined by participants' needs. At least 20 hours one-to-one mentoring. A strong network was established early in the program.	25 participants workshop (out of total 43 but only 9 mentorees) attended follow-up workshop 5 months after the program finished. All 25 said they would recommend mentoring to others. Ongoing network established.

Study ID & date, title & author/s of publication	Population sample	Research methods	Participation including business need or reason for participating	Meeting the need(s) of small business—direct or implied satisfaction
ID701 2000 Australia *Our business, our way: Indigenous perspectives on small business learning* Authors: Research Australasia & ResolveNorth	4 Australian Indigenous projects: on remote NT island; regional Queensland & metropolitan Sydney, NSW. (1) Galiwin'ku—13 CDEP managers & 4 labourers (2) Cairns—7 participants in 3 Indigenous art businesses (3) Stradbroke—20 participants (4) IBEC cluster—7 women in Sydney, 9 organisations and individuals in Forster	All four projects were assessed by informal discussions with all stakeholders and reporting back on levels of participation in training, and development of guides. The evaluators' reports were verified by discussion with the participants and stakeholders, then 'substantially edited' for this publication. It was difficult for reviewers to judge the authenticity without seeing the original evaluators' report.	Model 1: Galiwin'ku project—the trainer was well-known and respected educator with long-standing contact with the Galiwin'ku community & used appropriate teaching methodology, for example, adult learning principles. Model 2: Cairns project—response to training was positive and participants applied the skills learnt to their workplace. Model 3: Stradbroke & Gold Coast project—least successful. Gold Coast project—no one attended workshop. Model 4: the ATSI Business Women's Network is being incorporated.	Participants clearly show a preference for an adult learning approach—an interactive, informal and non-threatening training style.
ID 686 1996 Australia *The Enterprise Training Mentor Program* Author: Gordon Consulting	13 mentors from 12 small local businesses or agencies; these owners or managers had already significant involvement in training.	Training skilled mentors to help small business moving into workplace (on-the-job) training; pairing mentors with one another was a very significant learning strategy—met at training sessions and visited each other's businesses and shared experiences.	Described as 'action learning' where group took control of its own learning: participation in 5–6 formal training sessions spaced 3 weeks apart, including feedback sessions, guest speakers and role play to develop mentoring skills and a resilient network.	All participants indicated that they had gained relevant skills and understood well the role expected of them: to be 'a mirror/sounding board and not a consultant'.

Notes: CDEP = Community Development Employment Projects.
IBEC = Indigenous Business Economic Council.
ATSI = Aboriginal and Torres Strait Islander.

Table A9   Summary of included supporting authentic case studies

Study ID & date, title & author/s of publication	Population sample	Research methodology	Participation including business need or reason for participating	Meeting the need(s) of small business—direct or implied satisfaction
ID 167 2001 Australia *What convinces enterprises to value training and learning and what does not?* Authors: Figgis et al.	Stage 2 of this study, five businesses with fewer than 20 employees were directly engaged in 'thinking' & 'talking' about education and training practices.	Stage 2 of this study evaluates a specific strategy to use exemplars—authentic and detailed case studies—to approach small business owner–managers and engage them in conversations about flexible approaches to education and training for their business needs.	Small business owner–managers in conversation with 'outsiders' and 'thinking' about what their enterprise and individuals were doing in respect to training and learning and why, and 'learning' about other options.	Most owner–managers related positively to real and detailed insight into how other enterprises operate and were interested in reflecting on their training and learning approaches in personal or group interviews where they can 'think out loud'.

Study ID & date, title & author/s of publication	Population sample	Research methodology	Participation including business need or reason for participating	Meeting the need(s) of small business—direct or implied satisfaction
ID500 2003 Australia *How small business learnt about the goods and services tax: Lessons for vocational education and training* Authors: Billett et al.	Sample of 30 enterprises including micro-businesses (fewer than 5 employees), sole traders and small businesses (between 5 and 19 employees) Metropolitan (including inner-city and outer suburban locations) and non-metropolitan (rural and provincial city locations) in Queensland and New South Wales	Case studies developed from semi-structured interviews of 30 enterprises (in Phase 1). The contributions of different sources of learning were ranked (for example, 'just getting in and doing it', courses, local networks etc.) Phase 2: verification of case studies with 15 enterprises (four of which participated in Phase 2)	Small business 'forced' to learn a new way of recording financial transactions and paying tax. The study investigated the 'natural' (self-chosen) ways small businesses learned to handle the GST and BAS reporting. The 'choice' of interventions were: ✧ just getting in and doing it ✧ advice of other small business operators ✧ local networks ✧ consultants/tax specialists ✧ courses ✧ government support ✧ industry association ✧ other (for example, family).	The businesses sampled do not use any formal VET programs for GST or BAS—presumably none was available, but this study contributes to understanding non-formal interventions small businesses select and their specific applicability at different points along the 'learning curve'.
ID 694 1998 Europe *Working and learning in micro-enterprises in the printing industry* Authors: Van den Tillaart et al.	17 micro-enterprises (3–10 employees) in the printing industry in Finland, Spain, Ireland and The Netherlands.	Retrospectively, this study analysed 'formal' and 'informal or incidental' training and learning activity. Interviews with 17 owners or entrepreneurs & a survey with 63 respondents in real printing activities in the 17 case study firms in 4 countries.	Employees were involved most often in incidental learning which involved experiential learning by oneself or with experienced colleagues. They most effectively extended capabilities by taking on new work.	In the printing and multimedia sectors, small firms have to rely to some extent on the skills and capacity of employees to learn and make the best of learning opportunities in their daily work (incidental learning).
ID 415 2000 Europe *Entrepreneurial training for growth of small and medium-sized enterprises: Lessons from Central and Eastern Europe: Report* Author: European Training Foundation	9 transition economy country best-practice case studies which include SMEs with 10–150 employees.	Training of local authors in 9 countries to select & write up best-practice case study. For example, USAID focused on establishing networks of business support centres in the Ukraine. Provided practical skill-based short courses, legal and regulatory compliance and also 'train the trainers' to strengthen local expertise.	Training and support were designed to facilitate growth and development of small enterprises. In Estonia case study, 300 graduates (enterprises with fewer than 15 employees) from course in last 7 years; in Hungary case study, most were micro-enterprises with 0–10 employees.	The report highlights a strong focus upon identifying the problems and opportunities confronting the individual companies and programs focused on identifying areas of potential business improvement, team building and the process of delegation by owner–managers.
ID261 2005 UK *Employers' collaboration to raise skills in supply chains and clusters* Author: Confederation of British Industry (CBI)	Members of the Confederation of British Industry; included small firms (1–49 employees)	Email questionnaire survey: only 8% of CBI members responded to email questionnaire and only 17% of these were small firms; 72 responses from small firms; in total, 421 responses	Most firms work together in industry sector (60%) and also in local area (49%) or in supply chain (48%). Smaller firms co-operate on skills in many informal groups.	Over 95% of participants are satisfied that collaboration in skills training is effective and most report a positive impact on business performance.

Study ID & date, title & author/s of publication	Population sample	Research methodology	Participation including business need or reason for participating	Meeting the need(s) of small business—direct or implied satisfaction
ID384 2002 UK *Working towards skills: Perspectives in workforce development* Authors: Hughes et al.	2000 firms (2–50 employees but most fewer than 30 employees) in the United Kingdom	Survey, interviews & focus groups. Attracting only 85 responses (4.2% response rate) from a postal survey of 2000 small firms, researchers backed this with follow-up interviews of 12 managers; 6 employee focus groups.	Respondents were employers interested in training and prepared to engage in study and make employees available for focus groups. There are many examples of interesting practices and participation of managers and employees in training, including informal vs formal; in-house vs external training providers; suppliers; apprenticeships.	83% of businesses agreed that training leads to better productivity; 85% to better motivated staff. A common theme of focus groups was the importance of training to staff morale and commitment; and necessary for business growth.

Note: GST = goods and services tax; BAS = business activity statement; CBI = Confederation of British Industry.

Appendix 4: List of findings

Table A10 List of reviewers' findings from 11 core studies

	Core evaluation studies
	ID035 Findings: Skills for Small Business program, United Kingdom, 1997.
1	ID035 The majority of small businesses participating in UK Skills for Small Business program were recruited by being approached directly.
2	ID035 The small businesses which participated in UK Skills for Small Business program were already positive in their attitude to training even where actual training had been limited.
3	ID035 The majority of small businesses participating in UK Skills for Small Business program knew they probably should have a training plan.
4	ID035 UK Skills for Small Business attracted both firms that had not really come to grips with training and those which had wanted support and advice.
5	ID035 Service sector companies were more attracted to UK Skills for Small Business than manufacturing companies (four to one) even in industrial regions.
6	ID035 UK Skills for Small Business participating firms had high initial expectations of Skills for Small Business across a wide range of potential benefits.
7	ID035 Firms were not attracted by formal qualifications although the UK Skills for Small Business intervention was actually about providing formal qualifications (NVQ units) to key workers.
8	ID035 To further promote the UK Skills for Small Business real case studies are being prepared.
9	ID035 In the UK Skills for Small Business the training provider was decided by the TEC; the decisions varied and the outcomes varied as a result.
10	ID035 The benefits of the program were generally seen to outweigh the costs, but there were drawbacks e.g. jargon with NVQs, time involved and too much self-study.
11	ID035 In Skills for Small Business program progress was slower than the small businesses expected.
12	ID035 In the Skills for Small Business program the quality of some provision was questionable.
13	ID035 UK Skills for Small Business has an ongoing impact (in the sense of small businesses continuing engagement with the TEC or similar org.) where the TEC played a strong role in delivering Skills for Small Business; where the TEC outsourced delivery to a training provider, there is no such follow-on.
14	ID035 Small businesses participating in UK Skills for Small Business expect whoever provided the Skills for Small Business training to provide 'continuing care'; they were often disappointed.
15	ID035 There was an improvement in staff skills in 40% of businesses which participated in the UK Skills for Small Business program.
16	ID035 There was an improvement in training provider provision e.g. quality, quantity and flexibility after UK Skills for Small Business program.
17	ID035 There was an improvement in the business itself for some businesses participating in UK Skills for Small Business.
18	ID035 The larger small businesses (25–49 employees) benefited more from UK Skills for Small Business than the smaller ones.
19	ID035 UK Skills for Small Business changed some business' perceptions of barriers to training.
20	ID035 Most firms participating in UK Skills for Small Business intend to take training more seriously—increased training activity, expenditure and training plans.
21	ID035 The UK is very keen on Investors in People (or was at the time): involvement in Skills for Small Business led participants to decide whether they would or would not follow on with Investors in People.
	ID094 Findings: Small Firms Training Loans scheme England, Scotland and Wales, 1999.
22	ID094 UK Government-supported interest-free training loans are an incentive for small firms to invest in training.
23	ID094 Small businesses were very satisfied with the Small Firms Training Loans scheme as a way of funding training.
24	ID094 Most business owners and managers indicated that the training purchased using the Small Firms Training Loans had met their original business aims.
25	ID094 The 'repayment holiday' and the contribution the Small Firms Training Loans can make towards overcoming cash flow problems are the main attractions of the scheme from a business point of view.

26	ID094 'Cash back' incentives by the bank involved in Small Firms Training Loans along with interest-free loan period encourage small businesses to invest in training.
27	ID094 Small Firms Training Loans were mostly taken up by accounting, legal services, market research, management consultancy and computer-related businesses.
28	ID094 Small Firms Training Loans were taken up mostly by micro-businesses.
29	ID094 Computer software training was the most popular of Small Firms Training Loans-funded training.
30	ID094 Most businesses that used Small Firms Training Loans tended to be very young i.e. less than three years old.

ID133 Findings: Size matters: Small business—small workplaces, Australia, 2000.

31	ID133 The Australian Government-funded Small Business Professional Development Best Practice Programme (1996–1999) improved business performance of the majority of participating small enterprises. This included improved profits, sales/turnover or increased staff or survival chances.
32	ID133 The Australian Government-funded Small Business Professional Development Best Practice Programme (1996–1999) improved understanding of the value of training and increased commitment to training for the majority of participating small enterprises.
33	ID133 From Australian Government-funded Small Business Professional Development Best Practice programme (1996–1999), it was noted that collaborative self-help models, such as mentoring, workplace coaching, networks and clusters, are widely applicable to meeting the needs of small businesses, especially to improving participants' skills and knowledge and learning about training options.
34	ID133 Through the Australian Government-funded Small Business Professional Development Best Practice programme (1996–1999), success of comprehensive model depended on effective strategies for recruitment, using training as a business tool, winning commitment, supporting learners, and very importantly, establishing a service with a business outlook and on a sound business footing. It may also include adequate market research, low-risk buying strategies, needs analysis and benchmarking aids.
35	ID133 Through their participation in the Australian Government-funded 1999 Small Business Professional Development Best Practice programme, business service organisations proved to be more than equal to the challenge of small business training, especially where they had established structured working networks with small business and an entrepreneurial outlook. Through a central organisation and branch levels they brought economies of scale and a *sustained* focus on human resources (ongoing support). Other success factors included where training helped them achieve their corporate purpose or improve their profile with members, or they had some experience with training and they were dependent on members paying fees.
36	ID133 From Australian Government-funded Small Business Professional Development programme (1996–1999), mentoring approaches work in the training arena to meet the needs of small business. Typically, the models included complementary components, such as networking, guest speakers, learning resources, and discussion groups.
37	ID133 From Australian Government-funded Small Business Professional Development programme (1996–1999), networks and clusters work in the training arena to meet the needs of small business.
38	ID133 From Australian Government-funded Small Business Professional Development programme (1996–1999), it was noted that collaborative self-help models often successfully use action learning strategies to meet the needs of small business.
39	ID133 From Australian Government-funded Small Business Professional Development programme (1996–1999), workplace coaching meets the training and business needs of small business.
40	ID133 From Australian Government-funded Small Business Professional Development programme (1996–1999), it was noted that direct training needed to be contextualised to the individual small workplace, and flexibility (information and training delivery) was paramount to meet the needs of small business.
41	ID133 From Australian Government-funded Small Business Professional Development programme (1996–1999), it was noted that diagnostic services analysing skill/business needs are useful ways to make the connection between training and business needs (especially when end-users are involved in design and validation stages of the business needs analysis tools).
42	ID133 From Australian Government-funded Small Business Professional Development programme (1996–1999) discovered that low-risk buying is a potent strategy for enticing small enterprises into more structured approaches to training/learning but the Small Business Professional Development programme did not adequately develop and test this strategy.
43	ID133 From Australian Government-funded Small Business Professional Development programme (1996–1999) discovered that benchmarking is a potent strategy for enticing small enterprises into more structured approaches to training/learning but programme did not adequately develop and test this strategy.
44	ID133 From Australian Government-funded Small Business Professional Development programme (1996–1999), it was noted that genuine in-house small workplace training systems/models were not explored, but working directly with such workplaces to develop and test micro-systems may produce transferable models and advance a more sustainable and strategic response to small workplace training.

ID133a Big pictures from the small end of town, Australia, 1999.

| 45 | ID133a Small business participants in the Australian Government-funded Small Business Professional Development programme (1996–1999) achieved their personal aims of improving skills and learning more about training options. |

46   ID133a In the Australian Government-funded Small Business Professional Development programme (1996–1999), projects which tended to sell economic outcomes rather than 'training' or 'improved skills' had more success and less difficulty recruiting small businesses. Improved productivity, profit and survival capacity are main small business interests.

47   ID133a In the Australian Government-funded Small Business Professional Development programme (1996–1999), in general, intermediary business organisations, like regional development organisations, business enterprise centres, industry and trade associations, are more successful recruiters than training intermediaries.

48   ID133a In the Australian Government-funded Small Business Professional Development programme (1996–1999), the personal direct approach for recruiting small business owners/managers provides an opportunity for both parties to achieve a common understanding of what is on offer.

49   ID133a From the Australian Government-funded Small Business Professional Development programme (1996–1999), it was noted that the intervention strategies should target small businesses at the different stages of the business cycle i.e. start-up/ entrepreneurs, crisis/survival, growth/expansion and export stages.

50   ID133a From the Australian Government-funded Small Business Professional Development programme (1996–1999), it was noted that co-operative self-help structures, such as clusters and networks, are widely applicable to meeting the needs of small businesses.

51   ID133a From the Australian Government-funded Small Business Professional Development programme (1996–1999), it was noted that clusters and networks often successfully use action learning strategies to meet the needs of small business.

52   ID133a From the Australian Government-funded Small Business Professional Development programme (1996–1999), it was noted that a mentoring approach can work in a large range of contexts to meet the needs of small businesses.

53   ID133a From the Australian Government-funded Small Business Professional Development programme (1996–1999), it was noted that when end-users are involved in design and validation stages of the business needs analysis tools, analysing skill/business needs is a useful way to make the connection between training and business needs.

54   ID133a From the Australian Government-funded Small Business Professional Development programme (1996–1999), it was noted that ongoing support from a training broker or provider or facilitator is required to meet the needs of small business.

55   ID133a From the Australian Government-funded Small Business Professional Development programme (1996–1999), it was noted that flexible provision (information and training delivery) is paramount to meet the needs of small business.

56   ID133a From the Australian Government-funded Small Business Professional Development programme (1996–1999), it was noted that 'word of mouth' using previous project participants to recruit new participants, and mixing previous participants with new ones are great strategies.

ID226 Findings: Small Business Smart Business training voucher scheme, Western Australia, 2002.

57   ID226 Western Australian Government Small Business Smart Business initiative providing $200 voucher for training that improved business productivity was an incentive for small businesses (fewer than 20 employees) to participate in training.

58   ID226 Western Australian Government Small Business Smart Business training voucher: small businesses access training mainly from non-registered training organisations and private providers besides TAFE institutes.

59   ID226 Western Australian Government Small Business Smart Business training voucher: the majority of the training undertaken by small businesses was undertaken by the business owner, over half of which had not had previous training.

60   ID226 Western Australian Government Small Business Smart Business training voucher: almost all of the small businesses participating in the program would undertake future training.

61   ID226 Western Australian Government Small Business Smart Business training voucher: Overall, training providers delivering training to participating businesses met the needs of their clients in terms of timing, content, location and cost.

62   ID226 Western Australian Government Small Business Smart Business training voucher: computing and information technology was the area in which the majority of small businesses undertook training.

63   ID226 Western Australian Government Small Business Smart Business training voucher: 67% of participating small businesses felt that training was 'essential to ongoing business survival'.

64   ID226 Western Australian Government Small Business Smart Business training voucher: 2002 Small Business Smart Business does appear to have met its aim with 88% of small businesses that responded to the survey indicating a high level of satisfaction with the program.

65   ID226 Western Australian Government Small Business Smart Business training voucher: program resulted in a change in training culture (1) increased inclusion of training in business plans.

66   ID226 Western Australian Government Small Business Smart Business training voucher: program resulted in a change in training culture (2) increased delivery of training that otherwise wouldn't have happened.

67   ID 226 Western Australian Government Small Business Smart Business training voucher: training providers believed that the program needs to be more widely promoted.

68   ID226 Western Australian Government Small Business Smart Business training voucher: the program was promoted in a number of ways but small businesses were more likely to find out about the program through business enterprise centres, training providers and through word of mouth.

69	ID226 Western Australian Government Small Business Smart Business training voucher: some business enterprise centres found an administrative overload in the areas of identifying and sourcing training; processing and clearing vouchers and reporting to the Small Business Dev. Council and Department of Education and Training.

ID236 Findings: Pilot Small Firm Development Account year 1 ('training champion'), United Kingdom, 2003.

70	ID236 The majority of small businesses were satisfied overall with the small business workforce-development pilot UK program Small Firms Development Account year 1.
71	ID236 The UK Small Firm Development Account program year 1 succeeded in engaging a representative range of businesses, despite an open recruitment process.
72	ID236 The overall support provided by the UK Small Firm Development Account program year 1 was found by a majority of companies to be satisfactory and 'made a difference to the company in question' (although some areas of delivery were identified as less satisfactory).
73	ID236 UK Small Firm Development Account year 1 led to a better understanding of training needs in the companies.
74	ID236 UK Small Firm Development Account year 1 led to a range of benefits associated with a more structured approach to training.
75	ID236 UK Small Firm Development Account program year 1 led to increase in training budget.
76	ID236 75% of companies which participated in UK Small Firm Development Account program year 1 indicated they intend to use the training plan in future.
77	ID236 71% of companies which participated in UK Small Firm Development Account program year 1 said they will maintain the training champion role.
78	ID236 Financial constraint had been a barrier to training prior to the UK Small Firm Development Account program year 1, especially for small businesses.
79	ID236 Most companies which participate in the UK Small Firm Development Account program year 1 will use their general budget to fund their contribution to Small Firm Development Account training.
80	ID236 A barrier to completion of the UK Small Firm Development Account program year 1 was identified as lack of time, together with other priorities.
81	ID236 The majority of learners (training champions) found UK Small Firm Development Account year 1 training was relevant to their job and skill needs and increased their skills related to their job.
82	ID236 91% of 'training champion' learners from UK Small Firm Development Account year 1 would be willing to participate in more training if the company pays for it.
83	ID236 The majority of the companies participating in UK Small Firm Development Account year 1 training did deliver (or will deliver) all of the training in the plan.

ID260 Findings: Pilot Small Firm Development Account (SFDA) year 2 (Management and Leadership), United Kingdom, 2005.

84	ID260 Making the management and leadership training a special component (option) of year 2 Small Firm Development Account gave it a certain profile; about half the firms took advantage of the management and leadership training.
85	ID260 The second year Small Firm Development Account program seemed to be more focused on business needs which the firms seemed to especially appreciate.
86	ID260 Mentoring was either poorly explained or not explained and only a few took up the offer as part of year 2 Small Firm Development Account program.
87	ID260 The idea of mentoring sounded like a good idea in year 2 Small Firm Development Account program but it was not sufficiently thought through.
	The Small Firm Development Account developers themselves had only a vague understanding of the mentoring process – although they had determined that mentoring would likely not be widespread (no reason given).
	The two organisations used to source the mentors felt they were not given sufficient time to develop a sense of Small Firm Development Account mentoring and develop a collective approach.
	The small companies themselves (unsurprisingly) did not understand mentoring
88	ID260 One of the year 2 Small Firm Development Account options was networking by attending events sponsored by Business Links—most were not specific to Small Firm Development Account but rolled into broader Investors in People events. The take-up of these events was not great.
89	ID260 The exact monetary value of the support on offer in year 2 Small Firm Development Account program shaped some firms' decision about whether or not to sign up for the second year: if it didn't seem large enough, they didn't sign on again.
90	ID260 Many companies that continued into year 2 Small Firm Development Account program thought they had training needs not identified in year 1 or were interested in specific training.
91	ID260 An increase: many companies that continued into year 2 Small Firm Development Account program had new staff to train.
92	ID260 Many companies that continued into year 2 Small Firm Development Account program were interested in the management/leadership training on offer indicating an increase in participation in this type of training.

93	ID260 Smaller companies were more likely to not participate in year 2 Small Firm Development Account program because of a limited capacity to 'absorb' more training.
94	ID260 Finding enough time prevented many companies who wanted to participate in year 2 Small Firm Development Account program but did not.
95	ID260 More than half the non-participating companies said they would have liked to participate in year 2 Small Firm Development Account *had they known about the possibility.*
96	ID260 There is a difference to note between not participating in the second year of Small Firm Development Account program and not participating in further training.
97	ID260 More than half the non-continuing companies said they had completed all the training on the year 1 Small Firm Development Account developed training plan and the remaining firms had all completed some of what had been planned (beneficial but too early to know if it impacted on business performance).
98	ID260 In year 2 Small Firm Development Account program, the learners were asked for the reason why they undertook the training: most undertook the training because their job role changed and they needed to acquire new skills or they needed to update or renew their skills (25% of respondents indicated that they were new recruits to the company).
99	ID260 The development of training plans worked better in this second year of the Small Firm Development Account program than in the first year.
100	ID260 The only general barrier to completing year 2 Small Firm Development Account program was lack of time because company was busy, but in the main there were no serious constraints or barriers to engaging with the program.
101	ID260 One of the goals of this type of intervention (year 2 Small Firm Development Account) is to encourage small business to continue interacting with government agencies set up to support small business. In this case that would mean the companies continuing to use Business Link for support; this was never stated as an objective of Small Firm Development Account, but was clearly an outcome in the minds of the evaluation authors.
102	ID260 While the increase in year 2 Small Firm Development Account having 'structures' in place for training is consistently greater than in year 1, the difference is small. On the other hand, the percentage of small firms already having training structures in place at the end of year 1 was already high. These structures do NOT include training plans tied to business objectives.
	ID604 (with ID734) Findings: European Social Fund (ESF) Objective 4 (O4) funded training for small and medium businesses, United Kingdom, 2002.
103	ID604 UK Government funds provided under ESF Objective 4 to businesses to support training interventions encouraged participation in training by small- and medium-sized business managers and employees that meets the needs of small businesses (90% at least to some extent). O4 provision focused on management and information technology training needs identified as priority by employers.
104	ID604 Involvement in UK Government-funded ESF O4 training interventions (management and information technology training), particularly of employees, resulted in introduction of new qualifications to 41.4% of the small- and medium-sized businesses.
105	ID604 UK Government-funded ESF O4 training interventions (management and information technology training) which engaged managers only were less likely to result in the introduction of new qualifications—only 26.9% of the small- and medium-sized businesses.
106	ID604 Involvement in UK Government-funded ESF O4 training interventions resulted in O4 skills (management and information technology training) being passed onto other employees.
107	ID604 Involvement in UK Government-funded ESF O4 training interventions (management and information technology training) resulted in an increase in the level of training in 81.1% of the small- and medium-sized businesses.
108	ID604 Other finding: involvement in UK Government-funded ESF O4 training intervention (management and information technology training) had a positive general impact for most small- and medium-sized businesses especially in relation to softer measures such as business confidence. (69.8% indicated confidence in the future as an outcome of the intervention.)
	ID715 Findings: Facilitated business mentor scheme in Tasmania and New South Wales, Australia, 1999.
109	ID715 Facilitated business mentor schemes in Tasmania and New South Wales achieved participation of small business operators in acquiring skills and knowledge necessary to start up, survive or expand a business. Facilitated business mentoring is a deliberate pairing of a more skilled or experienced business person with a lesser skilled or experienced one, with the agreed-upon goal of having the lesser skilled person grow and develop specific competencies.
110	ID715 Facilitated business mentor schemes in Tasmania and New South Wales achieve small business operators' access to information and resources such as extended networks of business contacts necessary to start up, survive or expand a business.
111	ID715 Facilitated business mentor schemes in Tasmania and New South Wales provided small business operators with a different perspective and broader vision of their business and future opportunities, and support and reassurance of an experienced business person to start up, survive or expand a business.
112	ID715 Facilitated business mentor schemes in Tasmania and New South Wales increase small business operators' confidence and self-esteem, and rekindled enthusiasm and increased motivation to survive or expand a business.

	ID725 Findings: Feasibility of England's further education colleges supporting business innovation, United Kingdom, 2005.
113	ID725 Business innovation and support which is defined as support for company innovation and development (may include small-type research and development), primarily intended to improve a company's products and performance by England's further education colleges, engages small business in education and learning, and may create demand for training.
114	ID725 Feasibility of England's further education colleges providing business innovation and support: small business employers often find it more productive to discuss what would help their business before they consider training and qualifications (personal approach to participation).
115	ID725 Business innovation and support which is defined as support for company innovation and development, primarily intended to improve a company's products and performance, provided by England's further education colleges is well placed to offer mentoring for local business start-ups or small businesses in a growth phase.
116	ID725 Feasibility of England's further education colleges providing business innovation and support: the demand-side influence of employers would be strengthened through more equal dialogue and the establishment of mutual benefits between employers and [training] providers.
117	ID725 Business innovation and support which is defined as support for company innovation and development, primarily intended to improve a company's products and performance, provided by England's further education colleges encourages companies to network with each other, and so encourage the exchange of good practice'.
118	ID725 Feasibility of England's further education colleges providing business innovation and support: where further education colleges have considerable technical expertise e.g. new technology or equipment, small companies are willing to pay for research and consulting support.
	ID731 Findings: Small Business Smart Business training voucher scheme, Western Australia, 2004.
119	ID731 The Western Australia Small Business Smart Business scheme, which involved a training voucher of up to $200 ($400 in 2000) increased small business participation in training that improved productivity of the enterprise.
120	ID731 The aim of the Western Australia Small Business Smart Business scheme (training voucher) was to get small businesses involved in training that improved productivity of the business. Responses to the survey indicated that the scheme had a positive influence on training in the businesses, in terms of improved productivity, as well as increased profits, staff satisfaction and improved management skills.
121	ID731 In the Western Australia Small Business Smart Business scheme (training voucher), training involving computer programs (33%) and computer skills (20%) were the most popular areas of training undertaken by small businesses.
122	ID731 In the Western Australia Small Business Smart Business scheme (training voucher) larger businesses or businesses making a larger profit are more likely to invest more money into their training budgets.
123	ID731 The business enterprise centres delivered the Small Business Smart Business scheme (training voucher) exclusively throughout Western Australia via 27 centres. This strategy was particularly effective in getting small business to participate in training, as survey responses show that the business enterprise centres are consistently the main source of information for small business about the Small Business Smart Business program year to year, particularly for enterprises in regional Western Australia.
124	ID731 The Small Business Smart Business scheme (training voucher) has been available to small businesses in Western Australia for 4 years and has been a successful incentive for small businesses to participate in training from year to year.
125	ID731 Western Australia Small Business Smart Business training voucher scheme: formal training was considered by the majority of the respondents to be important but the decision not to participate was due to lack of time, cost and/or resources to accommodate stand-alone training or training that involves time away from the business.
126	ID731 Other finding: Western Australian Small Business Smart Business training voucher scheme: many respondents mentioned that they conducted in-house training or continuous on-the-job training which is not generally recognised as formal training and for which they could not access the training vouchers.
127	ID731 Other finding: Western Australian Small Business Smart Business training voucher scheme: small business perceives training as a cost and not an investment, with many believing that funding for training should be a government responsibility or at least subsidised.

Table A11 List of reviewers' findings from nine research studies

	Studies providing supporting evidence
	ID167 Findings: What convinces enterprises to value training? Australia, 2001.
1	ID167 The need to balance the formal and informal approaches to training and learning—not only balance but to integrate them—was an issue acknowledged by enterprises. Enterprises are interested in the way informal approaches to training and learning can contribute to the development of skills, knowledge and innovation in an effective and cost-effective way.
2	ID167 Workers and managers in an enterprise will (and should) learn from one another outside formal training programs. Similarly, the organisational or workplace culture (through interpersonal relationships) generates learning, productivity and behaviour in enterprises (especially if self-directed work teams, continuous improvement are in place). Stage one enterprises had in common a culture which amplifies the value of training and learning.

3	ID167 By including informal approaches from real, detailed case studies, including problems and issues from diverse industries, most employers related positively to the real examples and were interested in reflecting on their training and learning approaches in personal or group interviews.
4	ID167 Enterprises are interested in a flexible approach to skill and knowledge development.
5	ID167 Enterprises appreciate getting real and detailed insight into how other enterprises operate.
6	ID167 Enterprises need more direction on how they could assess the returns they might expect on investment in training.
7	ID167 The most effective channel of communication with enterprises is personal interaction.
8	ID167 The response of enterprises to overtures and information about training and learning depends on the timing.
9	ID167 Where enterprises reflected and questioned the culture of their organisation, a senior figure was involved and took the lead.
	ID261 Findings: Skills collaboration in supply chains and clusters, United Kingdom, 2005.
10	ID261 Inter-firm cooperation on skills or skills collaboration can be fostered by dedicated business networks, clusters or supply chains.
11	ID261 Businesses that collaborate on skills development report a positive impact on business performance.
12	ID261 There are two main models of skills collaboration: Model 1: Hub-and-spoke where leading companies drive skills improvements among smaller firms; Model 2: Small- or medium-sized firms work together on skills to gain mutual benefit.
13	ID261 The four broad categories of groupings for inter-firm skills collaboration are: local area—related sector; local area—disparate sectors; national sectors; and supply chains, although many employers reported working collaboratively in several of these groupings.
14	ID261 The nature of skills collaboration is driven by business needs and hence encompasses a wide variety of approaches.
15	ID261 The involvement of participants with similar business problems is a key factor in collaboration.
16	ID261 Commitment of senior management is a key factor in skills collaboration.
17	ID261 Availability of, or access to, training tailored to the needs of the organisation is a key factor in skills collaboration.
18	ID261 Smaller firms are able to acquire high-quality training at reasonable cost using the training resources of larger companies with skills collaboration in supply chain or cluster.
19	ID261 Skills collaboration in supply chains can provide the capacity to tackle skills shortages or gaps in small firms.
20	ID261 Firms are able to mentor and mutually learn from peers in skills collaboration in supply chain or cluster group.
21	ID261 Cross-fertilisation of skills may be possible between public and private sectors in skills collaboration.
22	ID261 Economies of scale can be attained though sharing training.
23	ID261 Pooling training with firms in different regions can overcome competitive concerns.
24	ID261 Small firms may find that using a training broker such as local union or industry representative can help foster skills collaborations.
25	ID261 Skills collaboration participants from small firms are most often owners and managers.
26	ID261 Smaller firms cooperate on skills in many informal groups—diverse networks, clubs and business organisations.
27	ID261 Employer collaborations in local areas may mean skills collaborations on more generic business issues or skills.
28	ID261 Time and resource constraints are a barrier to skills collaboration, especially for smaller firms.
29	ID261 Employers who are currently working together on skills collaborations are concerned about sharing information with competitors.
30	ID261 Firms which are not involved in skills collaborations by working together with other firms are most likely to have not had the right opportunity or be concerned about business confidentiality.
	ID384 Findings: Working towards Skills: Perspectives on workforce development, United Kingdom, 2002.
31	ID384 Workforce development is defined as 'training and development activities for the existing adult workforce, which relate to improvement of performance within current or future job roles'.
32	ID384 From 85 responses to postal survey of 2000 small- and medium-sized businesses in UK (4.2% response rate), most training for workforce development is formal taken through further education colleges or private training providers—higher proportion of small firms (employing fewer than 11 staff) than larger firms (probably reflects those that have apprentices). ID384 From 85 responses to postal survey of 2000 small- and medium-sized businesses in UK (4.2% response rate), a quarter of businesses had experience with apprenticeships.
33	ID384 From 85 responses to postal survey of 2000 small- and medium-sized businesses in UK (4.2% response rate), managers and senior staff tend to receive the most training.
34	ID384 From 85 response to postal survey of 2000 small- and medium-sized businesses in UK (4.2% response rate), 83% agreed that training and development leads to better productivity.

35 ID384 From 85 responses to postal survey of 2000 small- and medium-sized businesses in UK (4.2% response rate), 90% agreed that training and development is necessary for business growth.

36 ID384 From 85 responses to postal survey of 2000 small- and medium-sized businesses in UK (4.2% response rate), 85% agreed that training and development leads to better motivated staff.

37 ID384 From 85 responses to a postal survey sent to 2000 small- and medium-sized businesses in UK, factors which act as barriers to the effectiveness of training and development in small to medium-sized businesses: training and development leads to disruption to work (20% agreed), increased turnover of staff (15%), poaching of staff (22%) and increased wages (30%) and 48% were unsure whether T&D would lead to wage increases. 29% of businesses with fewer than 11 employees agreed that developing the workforce leads to poaching of staff. 29% of businesses employing 11 to 20 staff agreed that training and development would lead to wage increases.

38 ID384 From 85 responses to postal survey of 2000 small- and medium-sized businesses in UK (4.2% response rate), most small- and medium-sized businesses agreed that training and development is necessary in present circumstances.

39 ID384 Other: 71% of respondents to the postal survey of 2000 small- and medium-sized businesses in UK (4.2% response rate) indicated that training for the workforce was designed to meet business targets and aims.

ID415 Findings: Entrepreneurial training for growth of small- and medium-sized businesses in Central and Eastern Europe, 2000.

40 ID415 Best practice in entrepreneurial training for small and medium businesses in Central and Eastern Europe involves marketing training programs through intermediaries such as such as business clubs, employer organisations, entrepreneur associations and local enterprise development agencies or running joint ventures with them.

41 ID415 Key method of recruitment into training for small and medium businesses in Central and Eastern Europe was participation in exhibitions or use of introductory workshops, personal recommendations and promotion of successful clientele feedback in newspaper articles or presentations at open days.

42 ID415 The subsidisation of price of the entrepreneurial training for small and medium businesses in Central and Eastern Europe by external country donors or a large 'holding' company was a marketing asset but for sustainability the price subsidy must be taken over by a local or central government agency.

43 ID415 From case studies of entrepreneurial training in Central and Eastern Europe, individuals and companies do not necessarily have a clear notion of the problems they face or training needs. One of the objectives of the program is to help them focus in this respect: identifying the problems and opportunities confronting the individual companies.

44 ID415 From entrepreneurial training in Central and Eastern Europe, participants may add little to their formal knowledge but add a great deal to what they can do with their existing knowledge base as a result of having time to think and encouragement to structure their experience and the networks they build.

ID500 Findings: How small business learnt about the goods and services tax, Australia, 2003.

45 ID500 The introduction of the goods and services tax and the business activity statement meant that small businesses had to draw on different approaches to guide learning in how to implement this new Australian Government initiative.

46 ID500 The introduction of goods and services tax in Australia meant that the scope of the learning task was quite different across the small businesses (for example, from changes in the activities of the bookkeeper through to the restructuring of the business practices within the small business) (p.35).

47 ID500 In the introduction of the goods and services tax in Australia, in most cases, there was a gradual movement for small business operators from initial reliance on external sources and/or throughout the process, to a capacity to handle the demands of the learning task independently. However, this movement was completed at different stages and in some cases is still incomplete (p.50).

48 ID500 In the introduction of the goods and services tax in Australia, small businesses went through different stages of learning which drew upon different contributions to guide learning and the main contributions identified were three main sources: just getting in and doing it; the use of external advice; and courses.

49 ID500 In the introduction of the goods and services tax in Australia, small business operators who had access to bookkeepers or family members with financial expertise were able to rely far less on accountants and business consultants than those who lacked access to this kind of expertise.

50 ID500 In learning about the goods and services tax in Australia, small businesses followed an overall progress (process) from defining what had to be learnt (stage 1: information and goal setting advice), to initial attempts and implementations (stage 2: experiential learning), through to practice with task (stage 3: experience and problem-solving with access to advice and support) required to develop the capacity for independent practice (stage 4: experienced and competence).

ID693 Findings: Women in Small Business Mentoring program, Perth, Western Australia, 1999.

51 ID693. The Western Australia Women in Small Business Program pilot provides some evidence that a well-planned and coordinated monitoring and networking program is a cost-effective option for small business managers (in this case women) to develop their business skills and practices (or for professional development) to meet the needs of their small business.

52 ID693 The Western Australia Women in Small Business Mentoring Program pilot provides some evidence that a well-planned and coordinated monitoring and networking program is a cost-effective way for small business managers (in this case women) to develop their business skills (for professional development) to improve business performance and networks to meet the needs of their small business.

| 53 | ID693 Significant benefits for most small business women participating in the Western Australia Women in Small Business Mentoring Program were increased levels of personal and professional confidence. |
| 54 | ID693 The Western Australia Women in Small Business mentoring program pilot provides evidence that a well-planned and coordinated mentoring and networking program provides benefits such as strong, supportive and ongoing network and strategic partnerships. |

ID686 Findings Enterprise Training Mentor program Geelong, Victoria, Australia, 1996.

55	ID686 Skilling mentors in a regional Victorian 'self-help' local business network to help small business engage with workplace training (action learning): pairing mentors with one another (partnership) with the consequence that they met several times and visited each other's businesses (i.e. sharing of 'real' experiences) was 'a very significant strategy' for learning by mentors (p.10) Networking, feedback meetings, including guest speakers, and training sessions including role play, were found most valuable.
56	ID686 Skilling mentors in a regional Victorian 'self-help' local business network to help small business engage with workplace training (action learning): after the first 'formal knowledge' presentation, the subsequent speakers were arranged in response to feedback or suggestions from the group—an indication that the intervention built in a responsiveness to the participants and wasn't set in concrete at the start.
57	ID686 Skilling mentors in a regional Victorian 'self-help' local business network to help small business engage with workplace training (action learning): much of the knowledge acquisition was 'informal' from partnership feedback and discussion sessions as well as simple conversation before and after formal sessions (p.16).
58	ID686 Skilling mentors in a regional Victorian 'self-help' local business network to help small business engage with workplace training (action learning): in terms of improving the program, almost all participants stated that, in hindsight, one mentoring partnership changeover should have taken place in order to expose them to another business and another opportunity to try out mentoring skills (unsupported).
59	ID686 Skilling mentors in a regional Victorian 'self-help' local business network to help small business engage with workplace training (action learning): the participants were keen to talk about their experience and valued the frank and open exchanges both in the larger group and between mentor partners. Most preferred verbal feedback—to written reflection (reflecting their preferred learning style—sharing ideas with everyone involved and role-playing were found most valuable).
60	ID686 Skilling mentors in a regional Victorian 'self-help' local business network to help small business engage with workplace training (action learning): the program gave participants the information and motivation to pursue training-related issues in their own enterprises (unsupported).

ID694 Findings: Learning in micro-enterprises in printing industry in Europe, 1998.

61	ID694 Retrospective study of formal vocational training and incidental learning in 17 micro-enterprises (3–10 employees) in printing industry in four European countries: a third of employees in the printing sector have no initial vocational education and training.
62	ID694 Retrospective study of formal vocational training and incidental learning in 17 micro-enterprises (3–10 employees) in printing industry in four European countries: less than a third of employees in the printing sector participated in continuing vocational training during the last three years.
63	ID694 Retrospective study of formal vocational training and incidental learning in 17 micro-enterprises (3–10 employees) in printing industry in four European countries: employees with initial vocational education and training for the printing industry participate more often in continuing vocational training than workers without initial VET.
64	ID694 Retrospective study of formal vocational training and incidental learning in 17 micro-enterprises (3–10 employees) in printing industry in four European countries: employees with initial vocational education and training for the printing industry make more use of external experts than workers without initial vocational education.
65	ID694 Retrospective study of formal vocational training and incidental learning in 17 micro-enterprises (3–10 employees) in printing industry in four European countries: the most common methods of incidental learning involve experiential learning by oneself or with experienced colleagues.
66	ID694 Retrospective study of formal vocational training and incidental learning in 17 micro-enterprises (3–10 employees) in printing industry in four European countries: employees deemed that the most effective methods of incidental learning involved extending their capabilities by taking on new work.
67	ID694 Retrospective study of formal vocational training and incidental learning in 17 micro-enterprises (3–10 employees) in printing industry in four European countries: half of employees deemed that the least effective methods of incidental learning were learning by involvement in management/planning and from clients or users of products.
68	ID694 Retrospective study of formal vocational training and incidental learning in 17 micro-enterprises (3–10 employees) in printing industry in four European countries: the participation of staff in continuing vocational training depends to some extent on the skills of the small business owners.
69	ID694 Retrospective study of formal vocational training and incidental learning in 17 micro-enterprises (3–10 employees) in printing industry in four European countries: the opportunities and possibilities for employees to update their skills and to develop (new) skills are closely related to the way work in the firm is organised.

ID701 Findings: Our business, our way: Indigenous perspective on small business, Australia, 1999.

| 70 | ID701 Indigenous participants in small business training programs must feel ownership of their training and its impact on their society and culture for the program to be successful; therefore program development should ensure strong Indigenous input and community links (and focus on participants and community needs). |
| 71 | ID701 For Indigenous small business training projects to be successful, the involvement of the community members is essential in the design, planning, promotion and ownership of the program and, in particular, in the selection of key personnel (trainers/facilitators/managers) is critical. |

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72	ID701 From the four Indigenous projects in the Small Business Professional Development Programme, careful attention needs to be paid to the choice of facilitator, clarification of protocols, and roles and responsibilities of stakeholders in the project (and focus on the needs of participants).
73	ID701 From two successful Indigenous projects in the Small Business Professional Development Programme, the learning process should build on participants' existing knowledge and acknowledge the worth of their knowledge,
74	ID701 From two successful Indigenous projects in the Small Business Professional Development Programme, the learning process should also focus on needs of participants.
75	ID701 From the Galwin'ku Indigenous project model 'Using audiographics technology to teach small business concepts', the use of technology is shown to overcome remoteness as a barrier to training for small businesses, given a teaching methodology that builds on participants' knowledge and experiences, is delivered in the predominant community language and with a facilitator with whom the participants feel comfortable and have trust.
76	ID701 From the Cairns Indigenous project, Doing Business Better, enhanced retail skills in Indigenous businesses in Cairns using training package competencies by working together as a group and sharing experiences to assist the learning process for Indigenous small businesses and build on the existing knowledge and skills of participants.
77	ID701 The Gold Coast Indigenous project involved a workshop which no one attended and illustrates that failure to observe appropriate protocols and communicate effectively when working with Indigenous communities can result in failure of small business development programs.
78	ID701 From the success of the Indigenous Business Centre cluster, it can be noted that cluster network models are in tune with the way Indigenous people prefer to learn and support each other.
79	ID701 From the four Indigenous projects in the Small Business Professional Development Programme, an adult learning approach—interactive, informal and non-threatening training (that builds on the existing knowledge and experience of Indigenous participants)—is essential for the success of any small business development program to meet the needs of Indigenous small businesses.
80	ID701 From the four Indigenous projects in the Small Business Development Programme projects, correct protocols must be negotiated with the Indigenous community in the lead-up to project delivery, for Indigenous small businesses to participate in 'culturally appropriate training'.
81	ID701 From the Gakliwin'ku project, it was noted that the presence of clan leaders in a training group with younger Indigenous participants can be beneficial to the success of the training as it overcomes potential constraints on interaction with trainer due to traditional culture and etiquette.
82	ID701 From the Indigenous projects in the Small Business Development Programme, it was not that the word 'training' has negative connotations for Indigenous people (student-teacher not their learning preference but 'workshop' is more in the sharing knowledge and experience model') which emphasises the need for involvement of the community members in the planning of any training project.

Support document details

Additional information relating to this research is available from two support documents, which can be accessed from NCVER's website at <http://www.ncver.edu.au/publications/1737.html>. These documents are:

✧ *Education and training that meets the needs of small business: Support document—Summaries of included studies.* This document contains:
  ◆ Core studies: summaries of eleven core studies included in the systematic review
  ◆ Supporting studies: summaries of nine additional supporting studies included in the systematic review

✧ *Education and training that meets the needs of small business: Support document—List of 198 studies with abstracts and reasons for exclusion.* This document contains:
  ◆ Abstracts and information about 198 studies covered for the systematic review, and gives the reasons why they were excluded.

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