

Start-Up Training for Small and Medium-sized Enterprises

Executive Summary

Prepared for the Small Business Service

26 January 2004

Professor Ian Cooper
Eclipse Research Consultants
121 Arbury Road
Cambridge
CB4 2JD

Phone: 01223 500847
Fax: 01223 500852
e-mail: icooper@dircon.co.uk

Dr Jason Palmer
CAR
25 Gwydir St #6
Cambridge
CB1 2LG

Phone: 01223 460475
Fax: 01223 464142
e-mail: jason@carltd.com

Start-Up Training for SMEs: Executive summary

Introduction

In September 2003 Eclipse and CAR were commissioned by the Small Business Service to conduct a 'state-of-the-art' review of evidence about start-up training for SMEs. There were three components to the work:

1. a search of the literature on training, SMEs and start-up firms
2. interviews with leading edge researchers, and
3. interviews with business support agencies active in this field.

This summary is divided into two sections. The first section summarises our main findings and recommendations, while the second section presents more detailed findings using a question-and-answer format. A full reprint of our report to SBS will be available soon on www.carltd.com.

Main conclusions

- There is very little robust research on training for start-up firms. Overall, we agree with the leading edge researchers' judgement that the evidence in this area is shallow.
- Where we did uncover research investigating training for start-ups, there was little or no attempt to measure the performance improvements that resulted.
- We have identified four specific gaps in knowledge in particular which we believe merit new primary research:
 - the effect of start-up training on company performance
 - the effect of start-up training on company survival
 - the benefits for third parties (such as banks and accountants) from signposting and/or providing training for start-up firms
 - cost-benefit analysis to see whether resources invested in training are worthwhile from the start-up firm's perspective.
- There is unresolved debate about precisely when a new firm is born. However, there is some agreement that a 'start-up' firm is in its first 12 months' trading.
- Inexperienced and uneducated managers are the least likely to succeed when they set up in business, while educated business managers with prior experience in the sector have the highest success rate. The combination of strong previous experience and management know-how is commonly referred to as 'human capital'.

- 'Training' is typically perceived as formal provision of information, in groups, and with limited tailoring. 'Advice' and 'mentoring' have a more positive image – reckoned to be more flexible, and more closely geared to individual needs.
- While researchers and government agencies seek information about the overall impact of training on (company-wide) performance, managers in small firms are much more likely to monitor the effect of training on individuals.
- For this reason, among others, self-reported assessments of the impact of training are not reliable.
- There is evidence that government-backed advice is much more likely to satisfy clients if it includes both a site visit and a written contract.

Recommendations

- Many researchers focus on clusters of special start-up firms, basing selection on the type of business, previous status of founders, or founder characteristics. This kind of segmentation could be useful for marketing and evaluating SBS interventions.
- To find answers to the broader questions it is posing (summarised below), the SBS needs to commission primary research in this area. To win the confidence of the research community, other government agencies and intermediaries, it must be based on a robust sample of at least 2500 firms.
- The research should focus exclusively on firms receiving training (as distinct from advice) before completing their first 12 months. It must be based on reliable performance data, reported on tax returns or other official documents.
- It must have a tight definition of training – compatible with SBS's main priority for information.
- The research method must account for unavoidable selection biases – by using matched pairs, and/or econometric techniques, and/or multivariate analysis.
- It must also compare performance over a significant period of time (in research jargon, it must be 'longitudinal') – because the benefits of training and advice may not materialise immediately.

Detailed findings

Q1. What evidence is there that start-up training improves company survival, growth, productivity or other measure of performance?

There is more research into the impact of training for SMEs, or small firms, than there is for start-up firms, but even this is surprisingly limited. And even this offers mixed messages, with no definitive answers about long-term effectiveness.

A 26-month study by Barclays Bank (2001?) found that start-up firms receiving support from the National Federation of Enterprise Agencies had a higher survival rate and markedly higher sales growth than non-supported firms. However, the sample of supported firms was small and not representative, and the authors did not account for selection biases.

An evaluation of Business Links by PACEC (1998) found more than half of the 'significant interventions' by Business Links had resulted in actions to improve general business competitiveness in the SMEs advised. A survey of recipients suggested that some company growth was directly attributable to BL support. However, there was no clear performance improvement among firms employing less than 10 that received support.

Fraser et al's analysis (2002) of the Small Firms Training Loans Scheme compared the performance of 285 firms taking out loans to pay for training with a matched control group that did not. The authors found that participants in the scheme were more likely to survive and grow faster than non-participants. However, they warned this does not imply that enhanced performance would occur in all or even most small firms – there were strong 'selection biases', meaning that better managed firms (with better performance) were more likely to present themselves for training.

A study of firms employing up to 500, by the Cambridge Centre for Business Research (CBR), found a "strong significant impact of training on employment growth for 'persistent' trainers" who were engaged in training in both 1991 and 1997 (Cosh et al, 2000). This was based on a cohort of 768 firms. Training intensity and 'advanced human resource management' were found to have a significant impact on employment growth.

However, an older study by the CBR team for DfEE (Cosh et al, 1998) found no statistically significant effect of training on survival, and the authors concluded that training may be a response to good performance rather than a determinant of it. Further, profitability was found to be the most significant determinant of survival, and much more important than training or size. This study was well-grounded empirical research, based on 1640 responses to a survey.

Even less favourably, another survey, by Robson & Bennett (2000), found a significant **negative** relationship between profitability and the use of public sector advice, including Business Link. This was interpreted to indicate that less profitable firms are more likely to seek advice. This work was based on a much larger sample (2500 SMEs), and had sophisticated analysis and interpretation, but looked at firms employing up to 500 people, and was not restricted to start-ups.

In summary, it is difficult to collect reliable data about the effect of training at start-up stage. It is difficult (but not impossible) to remove the effect of selection biases. A third issue, just as important, is that small firms appear to be more likely to measure the effect of training on individuals' productivity. They are much less likely to assess its effect on the performance of the whole company. When they attempt to evaluate the effect of training on overall performance, they often appear to overstate the benefits. This raises doubts about the reliability of performance studies based on self-reported data.

Q2. What evidence is there that training raises business formation?

Very little reliable empirical evidence has been identified suggesting that training increases the number of people starting businesses. One project that did was Watson et al's report for DFES in 2003. This examined the effectiveness of a new start-up programme targeting people in deprived areas. The programme included training and a grant. The study found that for every 100 students helped, 35 businesses were created in addition to those that would have been created without help.

Q3. What empirical evidence is there that small businesses should invest their time in training?

Aside from the indirect evidence cited above – which gives mixed messages about the benefits of training – there is almost nothing. Leading edge researchers were unaware of any cost-benefit analyses of training for small firms, and our literature review did not uncover a single publication on this question.

We believe there is a case for further research in this area. However, such cost-benefit work would be even more complicated to carry out than research looking at performance improvement of training. Difficulties of measuring the investment in training of firms (in cost and time) would come on top of the problems of reliable performance measurement and attribution noted above. Participants in any survey would by necessity have to self-report their investments, which raises issues of reliability. And any questionnaires or interview schedules would be longer, which usually depresses the response rate.

We would therefore recommend that this research be conducted after reliable work has been carried out to investigate Q1 (and perhaps Q2). In this way some issues of reliability, attribution and representativeness could be solved on a somewhat simpler issue first. Conceivably, the same cohort of respondents could be used subsequently to examine cost-benefit questions.

Q4. Is there any evidence about the effectiveness of learndirect?

No. Admittedly, **learndirect** has a short history (and in any case is known to be undergoing change at the moment), and it may be too soon for research to have been published. Leading edge researchers knew of no work examining **learndirect**.

It would be quite possible to carry out research of the effectiveness of **learndirect** – with the same provisos raised above about reliability and attribution. Indeed, in some respects examining a single source of intervention would be simpler than looking at management training across the board. We would recommend a large sample – say 2500 firms – and matched pairs – comparing those using **learndirect** (and no other training) with firms that do not receive any form of training. We would also recommend using a sampling frame that is representative in terms of UK regions, founder background, and size and sector of

firm. We would also recommend using econometric techniques to help verify that the pairs are comparable.

Q5. How can you spot which firms will be successful at start-up stage?

This is reported to be an extremely difficult task. Even venture capitalists, whose role is to identify winners, are often said to choose the wrong horse. Sadly, 'entrepreneurship' is unobservable. Cressy and Storey's (1995) six-year study of new firms and their bank found that age and income of the founder were critical determinants of success, as was work experience in the same field. In addition, businesses that started small grew more quickly than those that started large.

Westhead et al's (1993) older study of 'survival factors' suggested that businesses established by teams are more likely to survive because they have access to more expertise. Smaller firms are more vulnerable because they suffer extremes of profitability, more likely to be dominated by major customers, over-dependent on a single product or service, and suffer from managerial weaknesses. David Smallbone cited evidence that founders from a middle-management background, with lots of experience and a range of skills (i.e. those with high levels of human capital) are more likely to succeed as high-growth companies.

There was a broad consensus among the researchers we interviewed that 'human capital' of the owner-manager was the most significant factor in ensuring business success. This includes prior experience in the sector – which is seen to be a very important contributor to success – skills and (sometimes) education. Stuart Fraser and Kevin Mole said that people who have been through higher education were more likely to succeed – although less likely to start businesses. David Storey said that human capital is closely related to age: older founders tend to have better survival prospects.

Q6. What do people about to start businesses know before they start, and what do they want to learn?

The literature suggests it is extremely difficult to generalise about what people wishing to set up a business know at start-up stage. Just as their businesses are heterogeneous, so the founders are all different, with different backgrounds, skills and experience. An additional problem is that skills are 'tacit', or unobservable and un-measurable. It is equally difficult to propose a generic set of skills for all businesses. As David Smallbone said, there is no template for the skills needed by small firms.

Bevan et al's (1989) survey of 472 people who were, had been, or intended to be, self-employed, found that only 2/5 of them wanted any help at all. This work, for the Department of Employment, explored what advice was sought. Respondents' priorities were: help with book keeping/accountancy, financial help, and help with tax/national insurance.

Among the experts we interviewed, Stuart Fraser cited Cressy's (1999) evidence that business founders tend to have prior experience of the sector they're in. David Storey agreed, saying more than half of them were previously employed in the same sector. Mark Hart said founders lack basic accounting skills, marketing and computer literacy.

Stuart Fraser cited surveys showing that small firm founders themselves think they need skills in business planning, marketing/accounts, and computer skills. Nigel Hudson referred to work by the Council for Management and Leadership, which identified people skills (especially motivational and leadership) and skills in analysis as the most important competences to develop for success.

Q7. What evidence is there about the skills that companies need at the point of start-up?

Surprisingly little. Again, David Storey's observation that you cannot generalise is valid: necessary skills are partly determined by the type, aims and structure of the business. Although there are many self-help guides aimed at new business founders (some of which we included in the literature review), their contents is usually based on experience and anecdote rather than any evidence about skills needs. One author, David Butler (2000), was honest enough to say he based his work on a case study of one: his own business.

The leading edge researchers noted that it is extremely difficult to assess skills. According to Kevin Mole they are largely unobservable and very difficult to measure. Mole and David Storey say it is easier to assess educational background, previous experience and age than skills per se. Nigel Hudson referred to work by the Council for Management and Leadership looking at the skills required for success in small business. They identified:

- people skills (especially motivational and leadership)
- skills in analysis.

However, these skills are very difficult to develop or even to define – they are tacit skills. Kevin Mole also cited work by Les Warrell, who studied 'Advantage West Midlands', examining small firms (not new firms). He identified 25 'advanced management skills'. The most important, he said, were:

- dealing with customer service
- communicating inside + outside the firm
- providing leadership + direction
- developing + monitoring employees
- developing quality
- building + managing teams

We have not been able to evaluate the reliability of Warrell's work, but his 'teams' orientation implies he was working with firms at the larger end of the 'small' definition, more likely to be established firms. David Smallbone said he had access to evidence showing that new firms need finance and marketing skills. However, he noted that 'even this isn't a template for all firms (and it's wrong to assume there is one)'. He said each firm presenting itself for training should receive a training needs assessment.

In view of SBS's remit for helping start-up firms access training, we think there is a major incentive for additional research in this area. There are established techniques for training needs assessment – but usually conducted individually, and we do not believe these could be used as part of a (paper-based) survey, conducted from a distance. It may be possible to gauge training needs by telephone interview – which is more time-consuming, and would have cost implications.

Once again, we would recommend a large sample size (minimum 2500 firms), stratified to reflect the composition of all UK founders in terms of regional, sectoral, age, education and past experience. (The task of establishing this composition is itself likely to be difficult.) We note that it can be difficult (but not impossible) to identify firms at the point of start-up. And we would warn against speculative attempts to translate training needs, once fulfilled, into performance improvements.

Q8. What do we know about customers' experience of training?

In Cambridgeshire the latest quarterly survey of Business Link users found 87% were satisfied or very satisfied with the service. (About a quarter of those surveyed were new starts.) Kevin Mole cited evidence that national satisfaction with Business Link advice is rising over time: while 58% were happy with the service in the 1970s, 84% were happy with the service in the 1990s.

Christopher Arnold, from ACCA, cited The Federation of Small Businesses (FSB) members' survey 2002, which found that "satisfaction for accountants' services was highest for business advice - 68%".

However, both the literature survey and interviews uncovered a range of difficulties encountered in trying to assess satisfaction accurately. David Smallbone pointed out that most people filling in feedback forms are the ones who complete the courses. People who dislike the course strongly tend to drop out before completion – so feedback forms overstate satisfaction. Moreover, even people who rate courses highly often can't say what they learnt or how their business benefited. Stuart Fraser identified another problem: many people presenting themselves for start-up training don't have a clear idea what they want to do. Such people may be easily pleased, and almost always report high satisfaction. 'Entrepreneurs' – who have prior business experience – have higher expectations, and tend to be more critical.

We have three recommendations for improving the measurement of customer satisfaction in training. First, we would recommend interrogating people who have dropped out of training as well as those who complete courses. This is harder, because it means chasing people who have exited the system, but may help to explain why they left. This information, in turn, may help to ensure that future recruits to the training do not leave for the same reason.

Second, we suggest that those people who have not yet started up in business should not be surveyed together with experienced entrepreneurs. (Indeed, in our view it is not advisable to train experienced and novice founders together either.) This would make it easier to avoid the problem Fraser identified – that novice trainees distort feedback forms because of low expectations. More weight could be given to feedback from experienced (and more demanding) entrepreneurs. The segmented analysis may also help to explain why respondents answer as they do.

Third, we think that the standard, simplistic, rating on a scale from 'very satisfied' to 'very unsatisfied' is of limited value for improving services. In our view a more qualitative record of customers' experience could be more valuable (although admittedly it would be more difficult to make comparisons). In particular, this could help to show training organisers how different contingents of the audience (e.g. experienced entrepreneurs vs. more naive trainees) respond to the training.

Q9. How can you raise the impact of, and satisfaction with, advice and training?

Bennett & Robson (1999) compared public and private sources of advice to SMEs. They found that users generally reported a higher impact from private than from public sources. They also suggested that government-backed advice is much more likely to satisfy clients if it includes both a site visit and a written contract. This is consistent with a report by Kevin Mole (2000), based on 200 interviews with business advisors.

Q10. What are the advantages for banks in moving away from the standard commercial/sales focus?

The literature survey and interviews provide very little evidence suggesting there are concrete benefits for banks in providing or signposting to training. As David Storey noted, almost 100% of start-up firms use a bank (compared to about 90% using accountants). Intuitively, then, it appears to be a good way to engage start-up firms.

However, Stuart Fraser's (2002) work looking at Barclays Bank and the Small Firm Training Loans scheme did not reveal major benefits for the bank. Fraser thought the bank only broke even on loans granted. Barclays Bank also withdrew from the scheme, suggesting it was not very profitable.

David Smallbone reported anecdotal evidence that banks see opportunities in identifying 'high growth' companies, to whom they can sell products. Working more closely with start-up firms may be a way to identify those most likely to grow fast, and/or those destined to fail.

David Storey said "SBS is right to address intermediaries in their start-ups work", and "using intermediaries is absolutely the right strategy" to recruit more start-up companies into training or advice. However, overall there is no empirical evidence showing that either banks or the firms they advise benefit from providing this support.

SBS's new initiative with the main highstreet banks represents a major opportunity to investigate the advantages (or otherwise) for banks acting in this way. With support and insider knowledge from the banks themselves, the costs, benefits, and profitability effects of the new initiative could be established by tracking the banks' work from the start. Conceivably, this new initiative could also offer the opportunity to track the performance of participant start-up firms – as the Barclays Bank study mentioned above did. However, it is possible to improve the research design by removing the selection biases and increasing the sample size of the Barclays study – thereby improving its credibility and reliability.

Q11. What are completion/drop out rates for start-up training?

There is very little published empirical work looking at drop-out rates, although several of the researchers and training providers were able to provide data about the drop-out rates they had themselves experienced. Some of them commented that their figures could under-state the true level of drop-outs because of the way figures were collected.

Stuart Fraser's work examining small firm participants in Investors in People found that only 4-5% dropped out. However, he noted that 'dropping out' was based on a formal withdrawal from IiP – so firms who stopped attending training but who did not tell the organisers they were withdrawing were (falsely) assumed to be still participating. Fraser also warned that the data collection was by the TECs – who had a vested interest in under-reporting drop-outs.

George Derbyshire said that the Entrepreneurs' Scholarship training programme had a completion rate of about 80%, implying a drop-out rate of 20%. Meanwhile David Moir and John Adams said that Business Link doesn't collect data on drop-out rates as such. In Cambridgeshire at least, firms rarely sign up for a series of events. And when they do, the drop out (or no-show) rate is 'extremely low'.

Mark Hart recorded a drop-out rate of 'about 20%' for the Business Start scheme run in Northern Ireland (which may or may not be relevant for other regions of the UK). He said that some of those who dropped out may also have been signposted to other initiatives, and so did not fall out of the business support system completely.

If SBS sought to carry out further research in this area, we would recommend comparing 1) the number of firms originally enrolled in a training programme with 2) the number of firms completing the programme. This comparison would make it more difficult for those running the programme to fudge, or hide firms that drop out.

Q12. What evidence is there of effective interventions to improve the take up of advice/training by start-up companies?

(In practice, this question proved not to be well-worded: we had to clarify for interviewees what we were getting at: marketing or the use of intermediaries to direct start-ups to advice or training.) There was almost no evidence-based work on this in the literature, and interviewees had only limited information.

Kevin Mole said anecdotally that financial grants are a good way to get start-up firms involved, but had no evidence. Mark Hart described a TV commercial used in Northern Ireland to promote a new small firms advice service. He said 'it was certainly effective in raising awareness and getting people to contact the call centre for further information'. But Hart was sceptical about how many went on to form businesses. In particular, he thought 'strategies aimed at raising business birth-rates aren't a good idea'.

The best mode of research to gather information on this topic would be compiling case studies, based on interviews with the agencies responsible for establishing the intervention, supplemented by interviews with firms that have 'received' the intervention. The prospect of working with banks as part of SBS's new initiative described above could form one of the case studies.