What is it and what does it aim to do?

Training involves publicly provided courses delivered to existing firms or to individuals aiming to start a business. Start-up (or entrepreneurial) training aims to increase the likelihood that an individual successfully launches a new business. For existing firms, training aims to improve business performance e.g. in terms of business growth, innovation or survival.

How effective is it?

For start-up training the evidence suggests that training usually leads to a higher probability of launching new ventures. However, while start-up training may have a positive effect on business creation, this does not necessarily imply a long run effect on business performance.

For existing firms, the evidence shows positive (but moderate) effects of training hours on business survival and stronger positive effects of training on profits or employment.

How secure is the evidence?

The evidence base on training is not as weak as for other areas of business support. However the conclusions on cost-effectiveness are still based on a limited number of studies (only half of the studies
present cost figures). More rigorous studies are required.

We found ten studies that examined the effectiveness of training. Three of these provided high quality evidence based on randomised control trials, two provided before and after comparisons using a control group and the rest were based on comparisons over time for a group who enrolled in the programme.

None of these studies come from the UK and six of them come from the US. For a full list of studies and summaries of their findings please see the Annex.

**Is it cost-effective?**

Half of the ten studies present information on costs (although two of those consider the same project).

The two studies that evaluate the same programme perform a cost-benefit analysis that takes into account the cost of the programme, as well as changes in earnings and unemployment benefits. They find the programme has a net cost to society of £938 per participant on average. However, for the subsample of unemployment benefit recipients, who experience larger self-employment effects and sacrifice less wages, there was a benefit of £1,204 per participant. Note, however, that this programme combines elements of both training and public advice, and it is not possible to uniquely attribute costs or benefits to either form of support.

A third study reports an overall annual cost of the programme of £129,498. Given the effect sizes for firm creation and the increase in employment, the cost-effectiveness of this project is estimated to be £23,310 per firm created and £1,683 per new job.

The other two studies show very low cost figures with respect to the benefits of the programmes they are analysing and conclude that the business training courses considered are cost-effective with benefits that far exceed the costs of such schemes.

While these schemes may be cost-effective from the firms’ point of view, if these benefits come at the expense of other local firms, this may not be cost-effective from an area point of view.

**Things to consider**

- Is start-up training good value for money? Since there are no persistent effects of start-up training on the performance of new ventures in the long run, the cost-effectiveness of such schemes should be interpreted carefully.

- Are there particular groups that would benefit more from training? For entrepreneurial training courses (training for start-up), it may be more cost-effective to target particular groups (e.g. women or unemployment and welfare benefit recipients).

- How long should training or other forms of support (e.g. subsidised consultancy services) continue post start-up? Training is effective in increasing start-up rates but does not appear to improve performance for these firms once established. In contrast, training provided to existing firms does improve performance.

- Are gains coming at the expense of other local firms? If so, this will reduce the net-benefits of the programme. This is more likely to be a problem for firms that serve local markets (see our evidence review on other Area Based Initiatives).

---

1 Using the 2010 USD-GBP exchange rate of 0.647491
Annex: Evidence on Training for Business Support

Business support is information, structured advice or longer term mentoring provided to firms by government funded programmes. Such interventions typically aim to increase rates of firm creation, to improve business survival, and to promote business productivity and employment growth. These interventions are justified economically where there is a lack of information available to firms (e.g. where the firm is unaware of what advice is available to them) or where there are wider economic impacts of giving advice to a single firm (e.g. where innovative behaviour is subject to ‘spillovers’). In our toolkit we focus on five forms of business support outlined in Box 1 below.

Box 1: Five types of business support

- **Public advisory services** are programmes where the counselling or advice comes directly from a publicly employed official or institution such as a local business centre.

- **Business mentors** describes programmes where the public sector does not provide advice directly but acts in a financing or ‘matchmaking’ role – putting SMEs in touch with mentors from the private sector.

- **Subsidised consultancy** describes programmes where the firm is given a voucher or grant to cover all or part of the costs of private sector consultation. In some models, the public sector may help the firm find the appropriate consultancy service, however, the primary role is financing rather than matchmaking (in contrast to business mentors).

- **Training** covers programmes where individuals from firms receive training in business or entrepreneurship. In the case of entrepreneurs this may be training focused on how to start up a firm.

- **Tailored support** may involve any of the four types of support above (or other types), but where advice is tailored to the specific firm or entrepreneur’s requirements. This often involves a greater intensity of support and possibly a combination of several types of support.

We focus here on publicly provided training courses aimed at individuals who want to start a business, or to existing firms.

We looked for evidence that evaluated the effect of training that aims to either (1) increase the probability of starting a firm, or (2) improve firm performance in the form of higher growth, more innovation or longer survival.

We focused on evidence from the OECD, in English. We considered any study that provided before and after evidence on the effect on participants; or cross-sectional studies that compared effectiveness for firms receiving different kinds of support. We also included more robust studies that compared changes to participants with a control group.

Using these criteria, we found ten studies that looked at the effectiveness of training in business support.

---

2 For more information on how we rank the robustness of evaluations, take a look at our introduction to the Scientific Maryland Scale: [http://www.whatworksgrowth.org/resources/the-scientific-maryland-scale/](http://www.whatworksgrowth.org/resources/the-scientific-maryland-scale/).
The evidence

Training for start-ups

**The evidence suggests that training usually leads to a higher probability of launching new ventures. However, while start-up training may have a positive effect on business creation, this does not necessarily imply a long run effect on business performance.**

Study 8 (which scores two out of a possible five on the Scientific Maryland Scale, or SMS) evaluates the effect of entrepreneurial training on new ventures and the growth of these ventures in the United States in 2004. Using individual level data, the authors find that the number of entrepreneurship-focused courses taken positively relates to business creation, even when controlling for counselling hours and other additional support that the entrepreneurs might have taken before enrolling to the programme. In particular, the probability of starting a new firm is 62% for entrepreneurs participating in entrepreneurship courses. However, when examining business performance, they find no effect of such courses on business growth, measured as an increase in employment 6 to 8 years after the venture is launched.

Study 12 (SMS 3) examines the impact of participating in a training programme in addition to general business support in Germany over 2000-2005. This programme offers three types of support: short-term self-employment training, coaching programmes, and discretionary start-up support. Using individual level data, the authors evaluate the impact of each of these forms of business support (on top of general advice) on firm survival. For training courses that last between 4 and 12 weeks, which consist of seminars to unemployed people who want to become entrepreneurs, they find low exit rates into employment positions after enrolment.

Two studies, 227 (SMS 5) and 233 (SMS 5) look at the impact of Project GATE (Growing America Through Entrepreneurship), a microenterprise programme aimed at supporting start-ups that was implemented as a randomised controlled trial in the United States. The ‘entrepreneurship training’ programme combined elements of classroom training and one-on-one business counselling, therefore, it is not possible to disentangle the effects of each of these two forms of business support. Study 227 (SMS 5) uses data on individual entrepreneurs finding an increased probability of owning a business in the first few quarters after random assignment. It also found an increased chance of being self-employed for the first few quarters, decreased chance of wage employment for some quarters but found no effect on total employment. There was little or no impact on earnings from self-employment, wage employment or total employment. Finally, the study finds no, or very little, impact on receipt of unemployment benefit. Study 233, using the same data, also finds that the project has limited impact on business ownership. Ownership increases by 13 percentage points in the short-run but this effect disappears 6 months after the training completion. In addition, the study finds no effects on business sales, earnings or employment. Overall, neither study 227 nor 233 recorded any long term benefits to the GATE programme.

Study 239 (SMS 3) evaluates the effects of the Junior Achievement Company Program in Sweden over the years 1994 to 1996. This programme delivers entrepreneurial training courses to upper secondary-level students in order to promote entrepreneurial entry and subsequent business survival. Using individual level data, the authors find that participation in the programme increases the likelihood of starting a new business by at least 20%. However, they do not find any significant effect of training courses on the survival of these new ventures.

Study 240 (SMS 2) estimates the impact of the Berger entrepreneurship programme (which provides training to business undergraduate and graduate students at the University of Arizona) on firm creation
and firm performance for new start-ups. Using individual level data, the authors find that entrepreneurship students were 11% more likely to own their own businesses after graduation. Moreover, they also find that these new ventures had more than five times the sales and employment than those of the non-entrepreneurship students.

Study 241 (SMS 2) evaluates the effects of delivering training to students at business colleges in Finland on the probability of starting a new business. Using individual level data, the study does not find an effect on the probability of participants starting a firm. The study does find a positive effect on perceptions of entrepreneurship.

Study 242 (SMS 2) examines the impact of the ACTivate programme in the United States over the period 2005-2009. This programme aims to help mid-career women to start a new business after learning new technologies. It selects around 30 high qualified women annually to participate and provides them with training once a week over a full year. Using individual level data, the authors find that, at the end of the period, between 15% and 20% of participants have started a new firm and that 77 additional jobs had been created in these new ventures.

**Training for existing firms**

For existing firms, the evidence shows positive (but moderate) effects of training hours on business survival and stronger positive effects of training on profits or employment.

Study 243 (SMS 5) evaluates the effect of being part of a 48-hour business skill training programme in Mexico (CREA Programme) in 2009. This scheme aims to help female entrepreneurs enhance their basic business skills and improve their firms' performance. Using individual level data the authors find that participants experience a 23% increase in daily profit. In addition, they also find a significant effect on weekly revenues post-participation.

Study 244 (SMS 2) examines the impact of participating in a training programme in the United States that aims to help small employers from disadvantage communities to sustain and grow their business. Using individual level data on programme participants, the authors show that 62% of participants increase their firm’s employment or, at least, maintain all the jobs they already have. They also find that around 50% of participants increase their revenues by 57% after the training.

For entrepreneurial training courses (training for start-up), it may be more cost-effective to target particular groups (e.g. women or unemployment and welfare benefit recipients).

Cost effectiveness

Half of the ten studies (studies 227, 233, 242, 243 and 244) present information on costs (although two of those – studies 227 and 233 – consider the same project).

Study 227 reports a full cost benefit analysis for project GATE. This programme combines elements of both training and public advice, and it is not possible to uniquely attribute costs or benefits to either form
of support. The cost to society of implementing the programme was £726 per participant in 2005. The effect of the programme was to (temporarily) increase self-employment as the expense of employment. This lead to an increase in self-employment earnings but a decrease in salary earnings. On average the net effect is a cost of £938 to society per participant. However, for the unemployment insurance (UI) group, who experience large self-employment effects and sacrifice less wages there was a benefit of £1,204 per participant. The conclusion is that project GATE is cost effective for UI recipients. One problem with these cost effectiveness calculations is that the benefits are based on differences between the treatment and control groups that are statistically insignificant. This means that the actual effect could still be zero and that the differences reflect chance. (In fact, study 233 which re-examines the GATE using the same data doesn’t find an effect on business earnings.)

Study 242 presents cost figures for the US ACTIVATE Programme. The whole scheme led to an average firm creation rate of 15% to 20% and around 77 additional jobs in 2010. The authors present an overall annual cost of the programme of £129,498. Given the effect sizes for firm creation and the increase in employment, the cost-effectiveness of this project is estimated to be £23,310 per firm created and £1,683 per new job.

Study 243 presents cost-effectiveness figures for a Mexican programme (CREA) providing training to female entrepreneurs. The average increase in daily profits is estimated to be the 23.4%. The authors show that the pre-participation daily profits of the firms who enrol in the programme were £6.54. Therefore, given the estimated effects, the daily increase in profits was £1.46, giving an annual increase in profits of £2,817.61. Comparing these figures with a cost of the CREA programme of around £37 per participant, it is clear that the scheme can be considered to be cost-effective.

Study 244 does not report any cost-effective figures but it does report the cost of the programme. This cost ranges between £312 and £1,248 per participant. Given the effect sizes of employment and revenues increases over participants, the authors claim that the returns of business training may be worth the low cost.

---

3 Using USD-GBP of 0.550022 for 2005.
4 Using the 2010 USD-GBP exchange rate of 0.647491
5 Using the 2009 USD-GBP exchange rate of 0.641169
6 Using the 2011 USD-GBP exchange rate of 0.623629
## Evidence Reviewed

<table>
<thead>
<tr>
<th>Ref. No</th>
<th>Reference</th>
</tr>
</thead>
</table>