

**The use of ICT and e-learning by work-
based learning providers
2006 Survey, Waves 1 and 2**

*A final report to Becta and the
Association of Learning Providers*

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Executive summary

1. This report presents the combined results of wave one and two of the 2006 survey of the use of ICT and e-learning by work-based learning providers. The two waves of fieldwork resulted in 171 responses from all types of work-based learning providers. Together these providers supported approximately 74,000 learners in the month prior to the surveys taking place (February and July 2006). Respondents were similar in characteristics to the 2005 survey.
2. The survey suggests work-based learning providers have developed a more structured and informed approach to the use of ICT and e-learning over the last 12 months. It shows that:
 - approaching half of providers (44%) believe they have a good knowledge of how to use ICT to manage and deliver learning. This compares with 32% in 2005. This increase may reflect the increasing number of providers with evidence about the effectiveness of electronic learning resources and that more providers have moved from piloting e-learning activities to embedding them;
 - the majority of providers have a written strategy that includes how they intend to use ICT to either manage, support or deliver learning. The proportion of providers without at least one of these written strategies has nearly halved from 30% in 2005 to 16% this year.
3. Increased knowledge and a more strategic focus appears to have led to greater clarity about the use and benefits of ICT and e-learning. Providers:
 - are taking a blended approach to the use of ICT to deliver learning (81%). Last year 78% had this strategy;
 - have expectations about the benefits of e-learning that match the reported evidence. Providers expect that it will improve the quality of learning delivered (81%), provide a more tailored learning experience (73%) and as a result increase completion (66%), achievement (68%) and retention (64%). They report that the main benefits are improved learner satisfaction (67%), and outcomes (67%).
 - are equally as likely as last year to develop their own resources in-house (53%), but are now more likely to use networked than standalone learning resources.
4. However, a significant minority of providers remain further behind in their knowledge and use of ICT and e-learning. Similar numbers of providers to last year report that they are not using ICT and e-learning (1%) and have little or no knowledge (22%).

5. The survey also suggests there is further work to be undertaken to understand the financial viability and benefits of e-learning. A significant number of providers that have used electronic learning resources do not know what benefits they have gained and over half (56%) of those that have developed resource in-house believe they will not recover the costs of their development or do not know if they will. This is an area of particular concern for providers given 81% are investing their own resources in the development of electronic learning resources.
6. Work-based learning providers have invested substantially in their ICT infrastructure:
 - nearly all have computers (92%) and fast internet access (85%) for their learners on their premises and 56% have on-site technical support for learners.
 - over one quarter have developed a dedicated website to support learners (28%) and allow remote access to their computer network (31%);
 - just under one sixth (15%) are using mobile devices such as PDAs and mobile phones for learning.
7. ICT is most commonly being used by providers as a tool for registering (80%), assessing initial skill needs (80%) and monitoring learners (80%) or for helping tutors to develop paper-based learning materials (73%). However, increasing numbers are also using it to provide tutor support to work-based learners (58%), help learners monitor their own progress (29%) and support collaboration between learners (27%).
8. The barriers to using ICT to manage, or deliver e-learning identified by providers include:
 - a lack of skills amongst staff to implement e-learning (47%) although just 8% highlighted this as the main barrier. Nearly half of providers have a skills gap in terms of the number of people they employ with the right skills;
 - a lack of time (40%). The highest number reported this as their main barrier (18%);
 - a lack of knowledge (35%). This is the main barrier for 13% of providers;
 - employers' ICT infrastructure (32%). Just 6% reported this as their main barrier.
9. The main barriers to providers addressing skills gaps are the amount of time (45%) and resources providers have (38%). The main skills gaps are in:
 - teaching and facilitating online (47%);
 - using specialist software (43%);

- developing electronic materials (42%);
- knowledge of using ICT resources (42%);

10. Providers would find additional support helpful in the form of training for tutors and assessors (49%) and more information and advice about e-learning products (50%) and how to deliver e-learning (45%). Providers are looking to the LSC (60%), ALP (40%) and private suppliers (39%) to meet these needs.

1. Introduction

1.1 This report presents the results of Wave 1 and 2 of the 2006 survey of the use of ICT and e-learning by work-based learning providers. It aims to:

- provide a comprehensive picture of the sector's adoption of e-learning;
- collect providers' views on e-learning and what might be preventing its effective use;
- help the Association of Learning Providers and partners identify how they can best support with the implementation of e-learning.

Methodology

1.2 The survey involved two waves of fieldwork.

- Wave 1 took place in February 2006 and involved a self-completion questionnaire distributed to work-based learning providers using two methods.
 - an electronic version of the questionnaire was available to download from the ALP website in the week-commencing 6 February 2006. Work-based learning providers were directed to the website through various e-newsletters and publicity including ALP's Countdown e-mail bulletin. We received 39 responses through this method;
 - a paper version of the survey was mailed with a reply paid envelope in the week commencing 20 February 2006 to 200 work-based learning providers on the ALP database. We received 57 responses through this method.
- Wave 2 took place in August 2006 and aimed to ensure the 2006 results were comparable with those from the 2005 survey by increasing the sample size and ensuring a sufficient number of smaller providers responded. The second wave of fieldwork used two methods:
 - a telephone survey of 25 small work-based learning providers that responded to the 2005 survey but had not yet responded to the 2006 survey. The self-completion questionnaire was modified slightly to make it more appropriate for a telephone interview;
 - a paper version of the survey was mailed with a reply paid envelope in the week commencing 1 August 2006 to 250 LSC-funded work-based learning providers not yet contacted as part of the 2006 survey. We received 50 responses through this method.

- 1.3 The two waves of fieldwork resulted in 171 responses. Although the 2006 survey used a slightly different methodology to the 2005 Becta survey, respondents to this year's survey represent a wide cross section of providers and are very similar in characteristics to the providers responding in 2005. Half of 2006 respondents (85) also took part in the 2005 survey.
- 1.4 The questionnaire was adapted from the one used in the 2005 Becta survey and included questions about:
- the type of provider and learning provided;
 - current use of information and communication technology (ICT);
 - current use of e-learning materials;
 - staff ICT skills;
 - approach to e-learning, barriers to take-up and future support required.
- 1.5 The questionnaire is included in Appendix A.
- 1.6 Caution needs to be taken when comparing small percentage changes between the two years. The size of the 2006 sample means the analysis has a margin of error of approximately $\pm 7\%$.

Structure of the report

- 1.7 In the remainder of the report we present the findings of each part of the survey and where appropriate compare these with the results of the 2005 Becta survey of work-based learning providers¹. The report is presented in five sections illustrating:
- characteristics of respondents;
 - current approaches and use of ICT and e-learning;
 - current use of ICT to support or deliver learning;
 - barriers to the take-up of e-learning and the type of support that providers would find helpful;
 - our conclusions.
- 1.8 Unless specified otherwise all the tables show percentages based on the number of responses reported at the bottom of each column.

¹ The Mackinnon Partnership (2005) A Survey of the use of ICT and e-learning by LSC funded work-based providers. Becta, Coventry.

2. Characteristics of respondents

Introduction

2.1 In this section we summarise the characteristics of providers that responded to the survey in terms of:

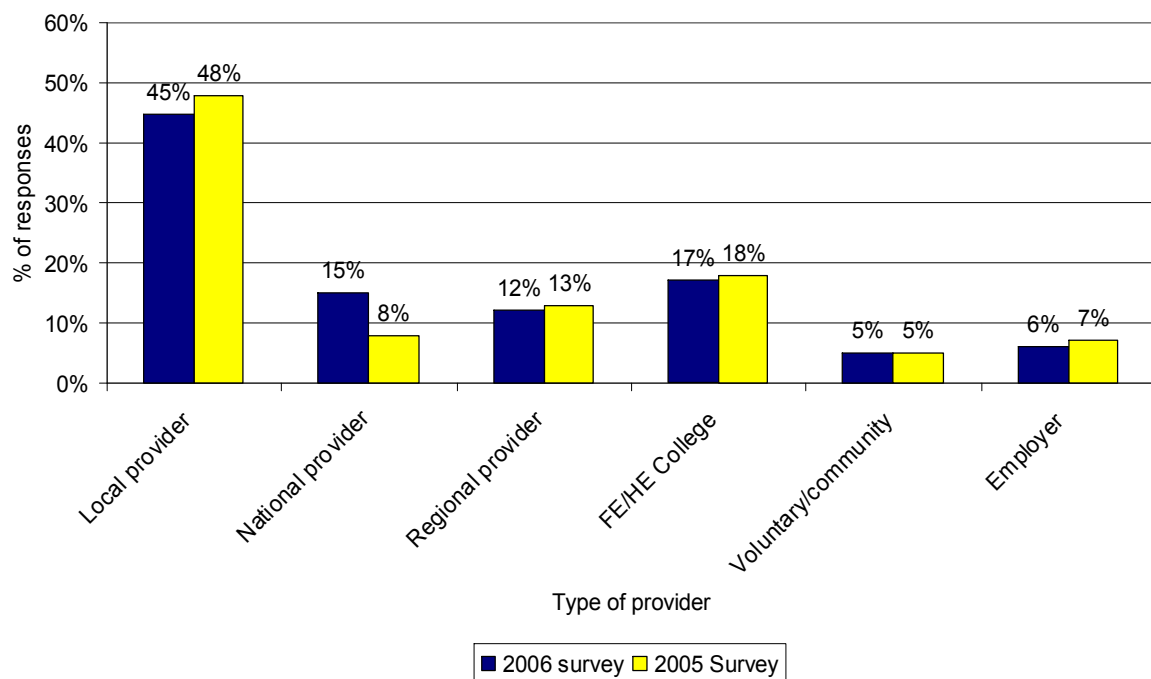
- type of provider;
- type of learning provided.

2.2 We also compare the characteristics of respondents to the characteristics of work-based learning providers responding with the 2005 Becta survey.

Responses by type of provider

2.3 Respondents were asked to identify the single best description of their organisation from a number of options. Just under half of responses (45%) are from providers describing themselves as local providers, while 15% are from national providers. Figure 2.1 shows that responses were very similar to the 2005 Becta survey, although we received slightly more responses from national providers.

Figure 2.1: Type of provider responding



- 2.4 Just 3% of providers responding to the 2006 survey do not have a contract with the Learning and Skills Council (LSC).
- 2.5 Responses represent all sizes of provider. One quarter of providers responding (26%) employ 10 or fewer people to manage, support or deliver work-based learning, and 32% employ more than 30. This is almost identical to the profile of the providers responding in 2005.

Table 2.1: The number of staff involved in managing, supporting or delivering work-based learning

| Number of staff | % of respondents (2006) | % of respondents (2005) |
|-----------------------|-------------------------|-------------------------|
| 1-10 employees | 26% | 26% |
| 11-30 employees | 37% | 37% |
| Over 30 employees | 32% | 35% |
| Don't know/No answer | 5% | 3% |
| Base: All respondents | 171 | 271 |

Type of learning provided

- 2.6 The majority of providers responding (81%) deliver Apprenticeships and this is the main type of learning delivered by 68%. Just over a third of providers (37%) deliver Entry to Employment and this is the main type of learning delivered by 11% of respondents. Over one third of providers (35%) are delivering bespoke training that does not lead to a certificate or qualification, but none of the providers report this as their main activity.

Table 2.2: Types of learning being delivered

| Type of learning | All types delivered % of respondents* | Main type delivered % of respondents |
|-------------------------------------------------------------|------------------------------------------|-----------------------------------------|
| Apprenticeships | 81% | 68% |
| NVQs | 62% | 9% |
| Basic skills | 42% | 1% |
| Entry to employment | 37% | 11% |
| Bespoke training not leading to a qualification/certificate | 35% | 0% |
| Industry recognised certificate/qualification | 32% | 2% |
| Professional body training | 16% | 2% |
| Jobcentre Plus | 15% | 2% |
| Learndirect courses | 14% | 1% |
| Foundation degrees | 6% | 0% |
| Other | 9% | 1% |
| Base: All respondents | 171 | 171 |

*Multiple responses

- 2.7 The providers responding to the survey deliver work-based learning across a wide range of occupational areas. The greatest number deliver business administration, management and professional learning (59%) and this is the main area of delivery for one fifth (21%) of all providers. A similar number (52%) deliver learning in retail, customer service and transportation, although this is the main area of delivery for just 7% of providers.

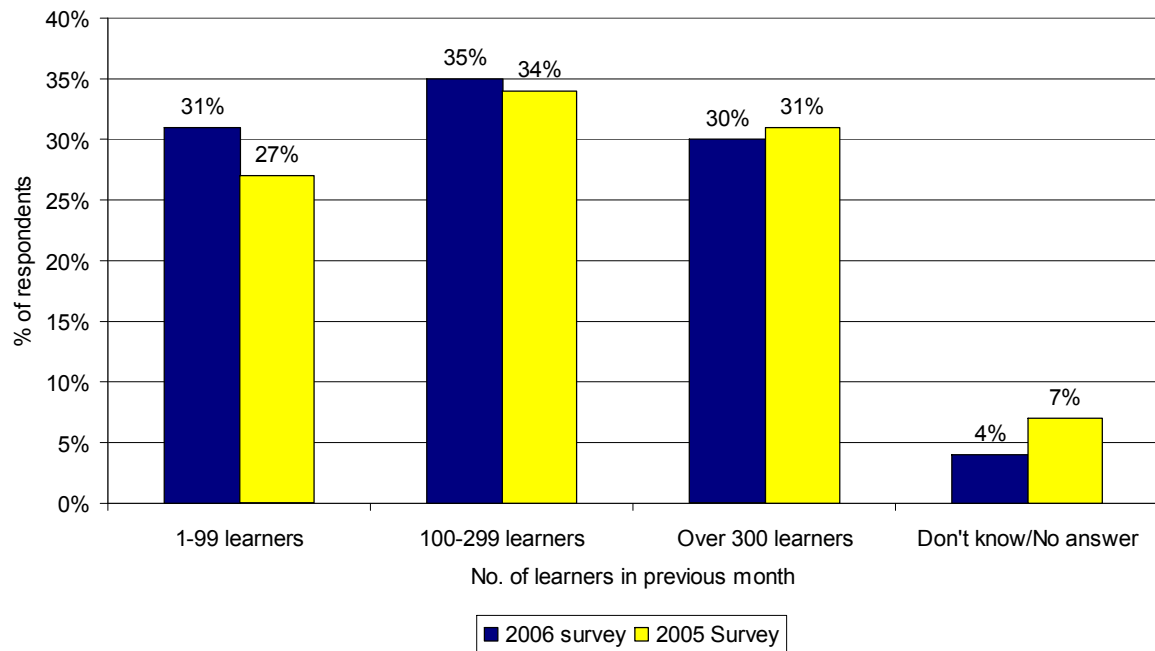
Table 2.3: Learning being delivered by occupational area

| Occupational area | All areas delivered % of respondents* | Main area delivered % of respondents |
|----------------------------------------------------|------------------------------------------|-----------------------------------------|
| Business administration, management & professional | 59% | 21% |
| Retailing, customer service & transportation | 52% | 7% |
| Engineering, technology & manufacturing | 45% | 22% |
| Information & communication technology | 32% | 3% |
| Health, social care & public services | 26% | 8% |
| Early years and education | 25% | 9% |
| Construction | 24% | 9% |
| Hairdressing & beauty therapy | 23% | 6% |
| Hospitality, sports, leisure & travel | 21% | 2% |
| Land-based provision | 13% | 4% |
| Visual, performing arts & media | 4% | 0% |
| Other | 6% | 4% |
| Don't know | 0% | 5% |
| Base: All respondents | 171 | 171 |

*Multiple responses

- 2.8 The pattern of learning delivered by respondents is similar to that delivered by respondents to the 2005 survey.
- 2.9 Over two fifths (43%) of providers responding to the 2006 survey only train or support learners funded at least partly by the public sector. A small number (4%) do not train or support any learners with the help of public funds.
- 2.10 In total, the 164 providers responding to the survey and answering the question (96% of respondents) had trained 73,833 learners in the previous month. This is a mean average of 450 learners per provider. The distribution of learners trained in the previous month varies substantially, with one provider supporting 9,000 learners, while another supported just one. The median average of work-based learners per provider is 163 and is very similar to last years' median average of 170. Just under one third of providers (31%) trained fewer than 100 learners in the previous month and 30% trained over 300. This is similar to the profile of 2005 survey respondents.

Figure 2.2: Approximate number of learners supported in the previous month



- 2.11 Most providers (83%) provide training or support to learners of all age groups, although seven providers (5%) train just adults and seven (5%) train just young people aged 16-19.

3. Approaches to the use of ICT

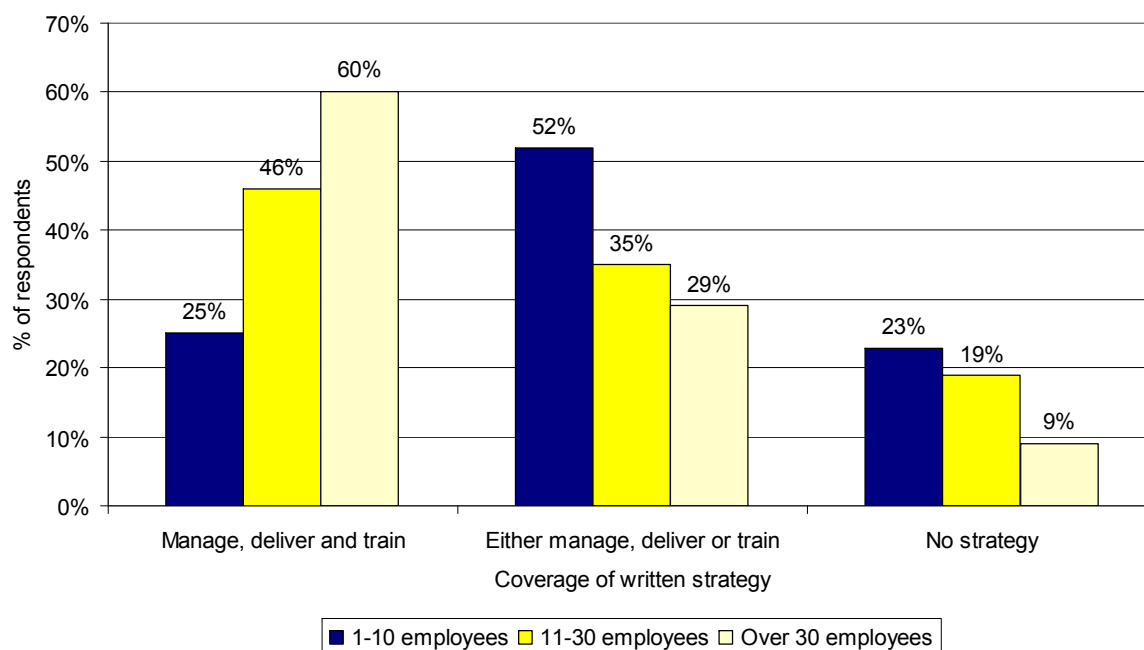
Introduction

- 3.1 In this section we discuss providers' current approaches to ICT and e-learning, including:
- ICT and e-learning strategic planning;
 - knowledge and approach to e-learning;
 - work-based learning ICT infrastructure.

ICT and e-learning strategic planning

- 3.2 Around three fifths of providers have a written strategy, either as part of a wider strategy or on its own, outlining how they intend to use ICT to:
- better manage or administer work-based learning (59%);
 - improve the quality of work-based learning delivered (64%);
 - train staff generally (62%).
- 3.3 This suggests slightly more providers have developed formal strategies over the last year in relation to the use of ICT to support and deliver learning. The 2005 survey reported just over half of providers had these strategies.
- 3.4 Providers are also slightly more likely to have a written strategy covering how they intend to use ICT in all three aspects. Just under half of providers (46%) have a written strategy that includes all three aspects, compared with just 40% last year. Just 16% do not have a written strategy covering any of these three aspects compared with 30% in 2005. Figure 3.1 shows that smaller providers are less likely to have any written plans relating to the use of ICT.

Figure 3.1: Providers with written strategies showing how they intend to use ICT for managing, delivering or training staff (comparison by number of staff employed)



- 3.5 Fewer providers (50%) have a written strategy specifically outlining how they intend to train staff to support the delivery of e-learning. This question was not asked in 2005 so we are unable to say whether this has increased or not.
- 3.6 Most providers' strategy, whether written or not, is to take a blended approach to the use of ICT to deliver learning. The majority of providers responding to our survey (81%) have strategies that anticipate using ICT and traditional methods to deliver work-based learning courses. However, a number anticipate using ICT alone to deliver either learning modules (21%) or whole courses (15%). A small number (5%) do not anticipate using ICT to deliver work-based learning courses. Compared to 2005 fewer providers anticipate using ICT alone to deliver whole modules.

Table 3.1: How providers' strategies anticipate using ICT to deliver learning

| Use of ICT for work-based learning delivery | % of respondents* (2006) | % of respondents* (2005) |
|------------------------------------------------|--------------------------|--------------------------|
| ICT and traditional methods to deliver courses | 81% | 78% |
| ICT alone to deliver whole modules | 21% | 32% |
| ICT alone to deliver whole courses | 15% | 14% |
| No use of ICT to deliver courses | 5% | 7% |
| Don't know/No answer | 14% | 12% |
| Base: All respondents | 171 | 271 |

*Multiple responses

- 3.7 Most providers are using ICT to support or deliver learning with the expectation that it will improve the quality of learning delivered (81%) and provide a more tailored learning experience (73%). Around two fifths expect to use ICT to reduce costs (41%) or to attract more (41%) or different groups of (36%) learners.

Table 3.2: What providers hope to gain from the use of ICT to support or deliver learning

| Benefit anticipated | No. of respondents | % of respondents * |
|-----------------------------------------------------------------------|--------------------|--------------------|
| Improve the quality of learning delivered | 137 | 81% |
| Tailored learning experience more closely to individual learner needs | 123 | 73% |
| Increase achievement | 115 | 68% |
| Increase completion | 112 | 66% |
| Increase retention | 108 | 64% |
| Increase learner satisfaction | 107 | 63% |
| Offer a broader range of learning | 85 | 50% |
| Attract more learners | 70 | 41% |
| Reduce costs | 69 | 41% |
| Attract different groups of learners | 60 | 36% |
| Don't Know/No answer | 6 | 4% |
| Base: All respondents currently using ICT | 169 | 100% |

*Multiple responses

Approaches to ICT and e-learning

- 3.8 Respondents were asked to describe their organisation's approach to using ICT to deliver e-learning:
- over a quarter of providers have either not considered e-learning yet (7%) or have considered it but not taken it forward (22%);
 - just 3% have considered e-learning but do not think it is appropriate;
 - over one fifth (23%) are piloting e-learning activities;
 - over one third are either currently embedding e-learning activities (26%) or have already embedded e-learning in their activities (10%).
- 3.9 Comparison with the results of the 2005 survey suggests that a number of providers have successfully piloted e-learning activities over the last year and have now embedded it into their activities.

Table 3.3: Best description of approach to using ICT to deliver e-learning.

| Use of ICT for work-based learning delivery | % of respondents (2006) | % of respondents (2005) |
|---------------------------------------------------------|-------------------------|-------------------------|
| Activities embedded/being embedded | 36% | 27% |
| Piloting/putting in place plans to implement* | 23% | 31% |
| Not considered yet/considered but not taken forward yet | 30% | 33% |
| Considered but do not think it is appropriate | 3% | 8% |
| Don't know/No answer | 9% | 1% |
| Base: All respondents | 171 | 271 |

*Putting in place plans to implement e-learning was not an option included in the 2006 survey

- 3.10 More providers are basing their approach on what they consider a good knowledge of e-learning. Nearly half (44%) believe they have a good knowledge of how to use ICT to manage and deliver learning, compared with 32% in 2005. However around one fifth of providers (22%) still believe they know very little or do not know enough about e-learning.

Table 3.4: Best description of knowledge held about the use of ICT to manage or deliver learning

| Knowledge of ICT for work-based learning delivery | % of respondents (2006) | % of respondents (2005) |
|-------------------------------------------------------------------------|-------------------------|-------------------------|
| Have a good knowledge of e-learning | 44% | 32% |
| We do not know the best way to use it | 16% | 34% |
| We are unsure how to introduce it | 14% | 13% |
| Do not know enough about e-learning to make a decision about what to do | 14% | 14% |
| Know very little about e-learning | 8% | 6% |
| Don't know/No answer | 5% | 1% |
| Base: All respondents | 171 | 271 |

Collaborative working

- 3.11 The survey asked providers whether they had collaborated with other providers on technology-related issues. The responses suggest that:
- just two fifths (43%) have collaborated with other providers on issues relating to information or data sharing. They are most likely to have collaborated with other work-based learning providers (27%), FE Colleges (16%) or employers (14%);
 - just under a third (29%) have collaborated on joint curriculum or resource development. They are most likely to have collaborated with other work-based learning providers (15%), FE colleges (13%) or employers (11%);

- just over one fifth (22%) have collaborated on joint infrastructure development. They are most likely to have collaborated with software developers (8%) and other work-based learning providers (7%) or FE colleges (7%).

Table 3.5: Collaboration with other providers on technology-related issues

| Type of provider | % collaborating on joint curriculum or resource development | % collaborating on joint infrastructure development | % collaborating on data or information sharing |
|------------------------|-------------------------------------------------------------|-----------------------------------------------------|------------------------------------------------|
| Other WBL providers | 15% | 7% | 27% |
| FE colleges | 13% | 7% | 16% |
| Employer | 11% | 4% | 14% |
| Software developer | 6% | 8% | 9% |
| School | 3% | 2% | 10% |
| Local Authority | 2% | 4% | 9% |
| Industry or trade body | 4% | 1% | 8% |
| ACL provider | 3% | 1% | 6% |
| HE institution | 3% | 1% | 2% |
| Any collaboration | 29% | 22% | 43% |
| Base: All respondents | 171 | 171 | 171 |

*Multiple responses

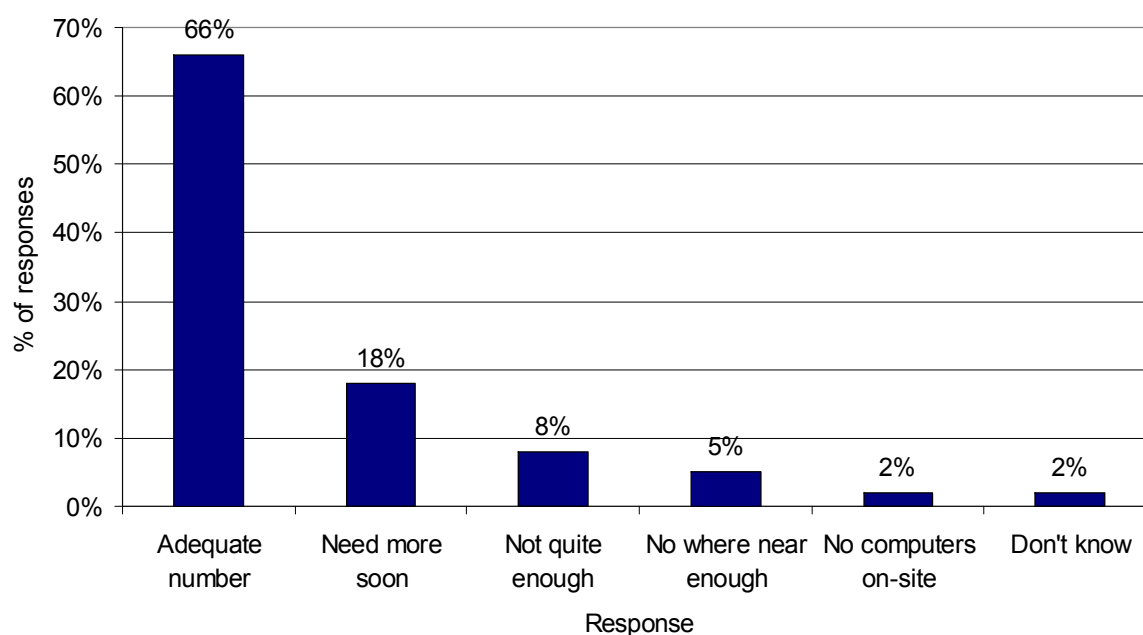
ICT infrastructure

- 3.12 Work-based learning providers were asked to provide an indication of their ICT infrastructure. Despite the fact that many learners have access to computers in the workplace and are not necessarily reliant on providers' ICT equipment, nearly all providers (92%) have computers on their premises for work-based learners' use. This does not necessarily mean they are dedicated to work-based learners as learning centres in FE colleges, for example, may have computers that are also accessible to full-time students.
- 3.13 Based on the 145 providers that provided details of the number of computers they have available to work-based learners we estimate that work-based learning providers have:
- a mean average of 97 computers on-site per provider. This is much higher than the average of 31 reported in 2005 and reflects the larger average size of respondents this year. The number of computers varies considerably with one provider reporting they had 2,500 computers available while another reported just two. This results in a median average of 24 computers per provider compared with a median average of just six computers per provider reported in 2005;

- a mean average of 12 work-based learners for every on-site computer. This is a much better ratio than the 21 learners to computer ratio reported in 2005. As in 2005 this year's figure includes a number of colleges with more than one computer for every work-based learner. This ratio is likely to include all the computers in the college available to any student. The largest ratio reported is 109 learners to every computer. This results in a median average of 6.5 learners for every on-site computer compared with a median average of just under 10 learners per computer reported in 2005.

3.14 The majority of providers believe that the number of computers they have on-site adequately meets the needs of work-based learners (66%), but 12% believe they do not have enough.

Figure 3.2: Do the computers on-site adequately meet the needs of learners in terms of the number available?



- 3.15 Similarly, nearly all providers (89%) believe their on-site computers adequately meet the needs of learners in terms of their quality. Just two providers (1%) think they are totally inadequate and nine providers (5%) think that most need upgrading.
- 3.16 Table 3.5 shows that compared with last year more providers have a fast internet connection and have a website to support learners. In contrast, fewer have laptops for loan to learners.

Table 3.5: Does your organisation have the following infrastructure?

| ICT infrastructure used for work-based learning | % of respondents* (2006) | % of respondents* (2005) |
|------------------------------------------------------------------------------|--------------------------|--------------------------|
| Computers at your premises for work-based learners' use | 92% | 90% |
| Computers at your premises for learners' use with a fast internet connection | 85% | 75% |
| On-site technical support for learners | 56% | Not asked |
| Laptops for loan to learners in the workplace | 32% | 49% |
| Electronic whiteboards | 36% | 30% |
| A computer network accessible remotely by learners | 31% | 27% |
| A dedicated website to support learners | 28% | 19% |
| A Virtual Learning Environment | 26% | 25% |
| Mobile devices that are used for learning such as PDAs or mobiles | 15% | Not asked |
| Video-conferencing facilities | 6% | 8% |
| Base: All respondents | 171 | 271 |

*Multiple responses

3.17 This year the survey also asked about the availability of on-site technical support for learners and the use of mobile technology for learning. It found that:

- 56% of providers have on-site technical support for learners. This support is most likely to be provided by FE colleges (82%) and larger providers;
- 15% of providers have mobile devices such as PDAs and mobile phones that are used for learning. National or regional providers are more likely to be using this technology (24%) than other types of providers. Providers with over 30 staff (26%) are also more likely to use this technology than providers with under 10 staff (7%).

4. Use of ICT for learning

Introduction

- 4.1 In this section we illustrate what work-based learning providers are using ICT for. We specifically highlight their use and development of standalone or networked learning resources.

General use of ICT

- 4.2 As we reported in last year's survey, the majority of providers are using ICT to register learners (80%). However, a larger proportion than last year are using ICT in a more sophisticated way:
- 80% are using ICT to assess learners' initial skill needs. This compares with 65% of providers using it for this purpose in 2005;
 - 80% are using ICT to monitor learners' progress compared with just over half last year (56%). In addition, nearly one third of providers (29%) have systems to allow learners to monitor their own progress, compared with just one fifth (19%) one year ago.
- 4.3 The survey confirms last year's results that very few providers (1%) do not use ICT for some form of learner support or delivery.

Table 4.1: Does your organisation currently use ICT to....

| Current use of ICT | % of respondents* (2006) | % of respondents* (2005) |
|-------------------------------------------------------------------------------|--------------------------|--------------------------|
| Help assess the initial skill needs of work-based learners [#] | 80% | 65% |
| Help monitor work-based learners' progress [#] | 80% | 56% |
| Register learners | 80% | 87% |
| Help tutors develop paper-based work-based learning materials | 73% | 82% |
| Provide tutor support to work-based learners | 58% | 51% |
| Help deliver paper-based learning materials (other than computer user skills) | 57% | 59% |
| Help structure or schedule learning | 54% | Not asked |
| Assess work-based learners for certification [#] | 53% | 53% |
| Help deliver electronic learning materials (other than computer user skills) | 53% | 52% |
| Assess work-based learners' progress [#] | 49% | 56% |
| Help tutors develop electronic-based learning materials | 49% | 52% |
| Help work-based learners monitor their own progress | 29% | 19% |
| Support collaboration between learners eg through e-mail discussion groups | 27% | 21% |
| Provide an online 'virtual' space where learners can save their work | 25% | Not asked |
| Help assess the training needs of employers you work with | 14% | 20% |
| None of the above | 1% | 3% |
| Base: All respondents | 171 | 271 |

* Multiple responses.

[#] Asked as part of a separate question on the use of ICT for assessment in the 2005 survey.

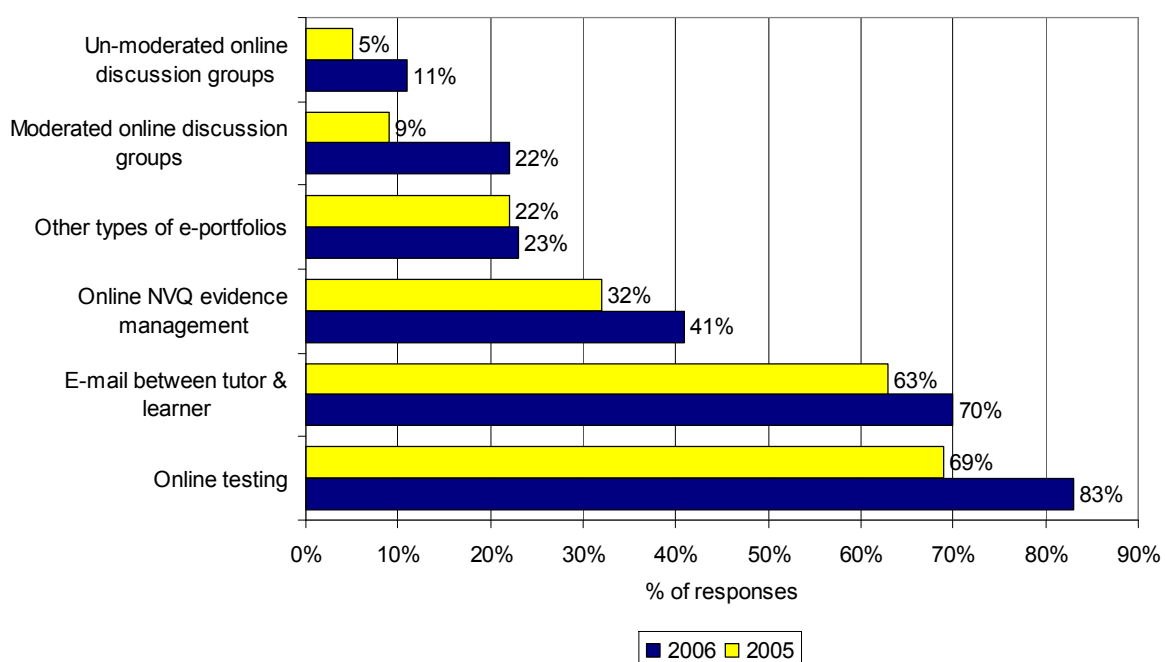
Use of ICT to manage and support learning

4.4 Providers are most commonly using ICT to support or manage learning in some, most or all of their work-based learning programme areas by using:

- on-line testing (83%);
- on-screen key skills (83%);
- e-mail between learner and tutor (70%).

4.5 Compared with last year more providers are using ICT to support or manage learning in all programme areas. The largest increases are in the use of ICT for online testing, tutor moderated discussion groups and online NVQ evidence management.

Figure 4.1: The use of ICT to manage or support work-based learning programmes



- 4.6 The number of providers using online testing and onscreen key skills testing across all their work-based learning programmes has increased, but the other activities are generally being used in some or most areas. This suggests providers either are still trying out the technology or are not sure it is relevant for all their programme areas.

Table 4.2: How many of providers' work-based learning programmes use ICT to manage or support learning

| ICT use | All | Most | Some | None | Don't know/ No answer |
|---------------------------------------|-----|------|------|------|-----------------------|
| Onscreen key skills tests | 49% | 21% | 13% | 11% | 7% |
| Online testing | 36% | 24% | 23% | 8% | 9% |
| E-mail between tutor & learner | 19% | 15% | 36% | 15% | 15% |
| Online NVQ evidence management | 9% | 8% | 24% | 37% | 22% |
| Other e-portfolios | 4% | 3% | 16% | 46% | 31% |
| Moderated online discussion groups | 2% | 3% | 17% | 52% | 27% |
| Un-moderated online discussion groups | 2% | 1% | 8% | 58% | 31% |

Base: All respondents using ICT (169 respondents)

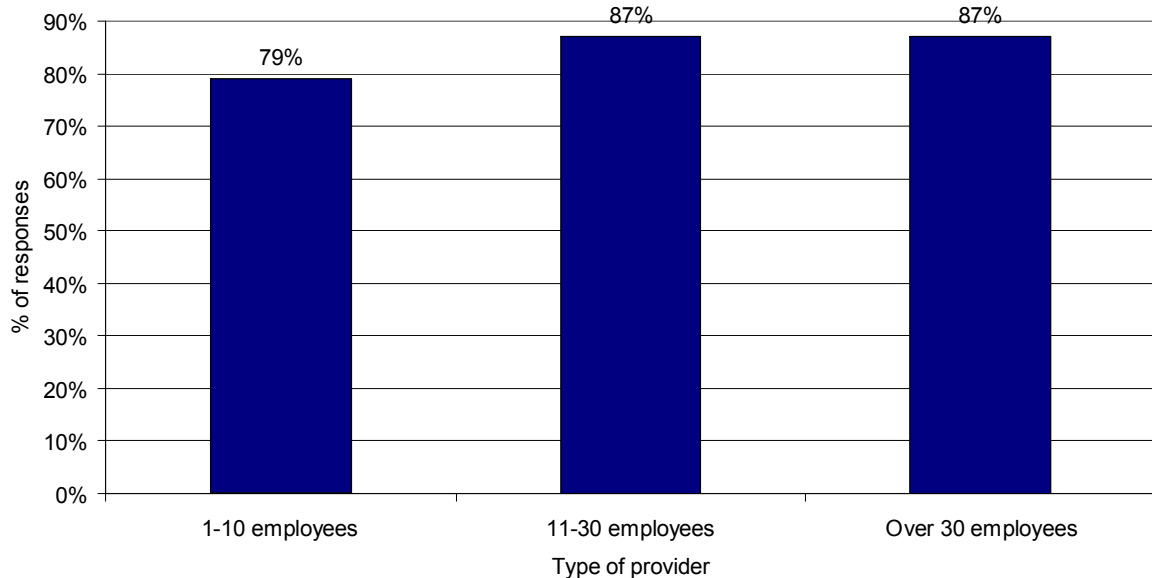
Note: Table shows row % ie each row totals 100% (allowing for rounding) and is based on 169 responses

The use of electronic learning resources

Where electronic resources are used

- 4.7 Most providers (84%) use standalone (eg CD ROMS) or networked (eg web-based) computer based learning resources in some of their learning programmes. In 2005 89% reported using these resources. Smaller providers are slightly less likely to be using computer based learning resources.

Figure 4.2: % of providers using standalone or networked learning resources



- 4.8 Providers are using electronic learning resources across all types of work-based learning delivery. They are slightly more likely to use networked resources than standalone resources for all types of delivery. Providers delivering Apprenticeships and basic skills are most likely to be using electronic learning resources. Few providers delivering bespoke training that does not lead to a qualification are using electronic learning resources for this activity.

Table 4.3: Use of e-learning resources in programmes providers are delivering

| Type of learning delivered | % delivering programme using networked resources | % delivering programme using standalone resources | Base: Number of providers delivering programme |
|---------------------------------------------------|--------------------------------------------------|---------------------------------------------------|------------------------------------------------|
| Apprenticeships | 68% | 55% | 139 |
| Basic skills | 67% | 64% | 72 |
| NVQs | 53% | 40% | 106 |
| Jobcentre Plus contracts | 52% | 48% | 25 |
| Entry to Employment | 48% | 46% | 63 |
| Industry recognised certificate/ qualification | 47% | 45% | 55 |
| Professional body training | 44% | 37% | 27 |
| Foundation Degrees | 40% | 30% | 10 |
| Training not leading to qualification/certificate | 15% | 15% | 60 |

Note: Percentages are based on the number of providers delivering learning in that programme area

- 4.9 Providers are using standalone and networked resources across all occupational areas. All providers delivering visual, performing arts, and media use electronic learning resources, but they are least used in the land-based sector. In all occupational areas, except construction and land-based, providers are more likely to be using networked rather than standalone resources.

Table 4.4: Use of e-learning resources in occupation areas being delivered

| Type of learning delivered | % delivering programme using networked resources | % delivering programme using standalone resources | Base: Number of providers delivering programme |
|-----------------------------------------|--------------------------------------------------|---------------------------------------------------|------------------------------------------------|
| Visual & performing arts/media | 100% | 17% | 6 |
| ICT | 65% | 44% | 55 |
| Hairdressing & beauty | 64% | 38% | 39 |
| Engineering, technology & manufacturing | 64% | 38% | 77 |
| Business admin, management & Prof | 60% | 45% | 101 |
| Hospitality, sports, leisure & travel | 53% | 42% | 36 |
| Early years and education | 52% | 45% | 42 |
| Health/social care & public services | 49% | 42% | 45 |
| Retailing, customer service & transport | 43% | 34% | 89 |
| Construction | 41% | 46% | 41 |
| Land-based provision | 27% | 36% | 22 |

Note: Percentages are based on the number of providers delivering learning in that occupational area

- 4.10 Providers are generally using networked learning resources more than in 2005, although they are using them slightly less in land-based, construction and retailing, customer service and transport occupations. In contrast, standalone resources are being used much less in all occupational areas except construction where providers are most likely to be using this type of electronic learning resource.

Figure 4.3: Occupational areas using networked e-learning resources

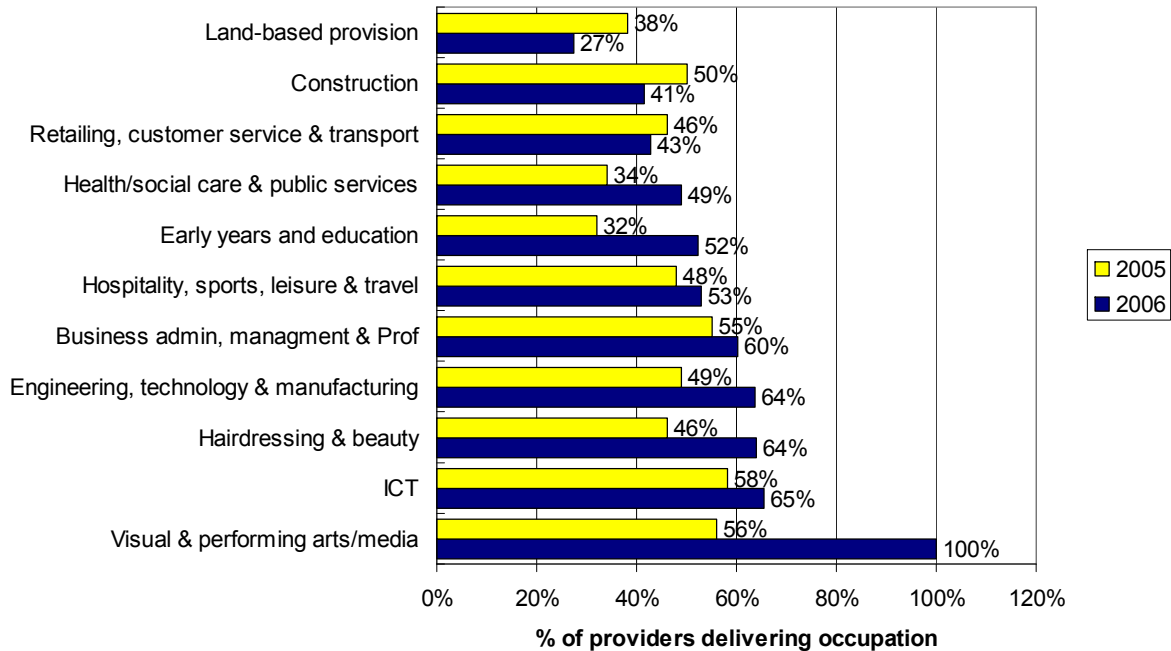
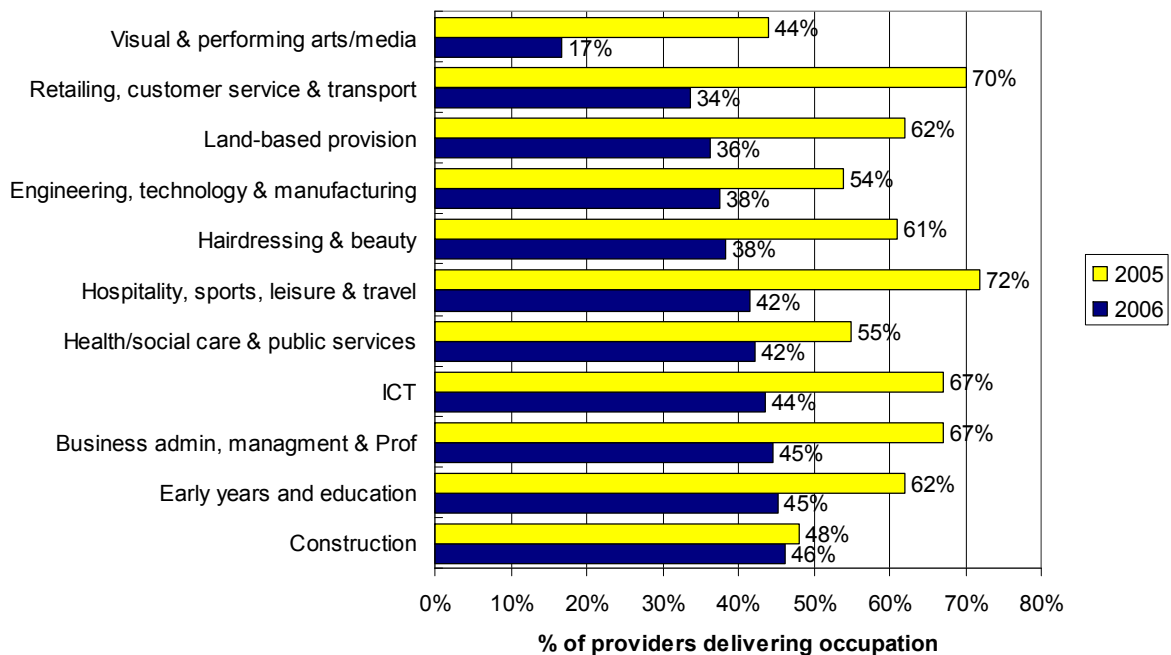


Figure 4.4: Occupational areas using standalone e-learning resources



- 4.11 Providers do not tend to focus the use of electronic learning resources on particular age groups. The survey reported that 21% of providers mainly use standalone or networked learning resources with young people (aged 16-19) and just 3% use them mainly with adults (aged over 19).

Content and source of resources

- 4.12 Just one third of providers using standalone or networked resources are using resources that include multi-media content such as audio or video clips. The materials most commonly include internet web-links (59%), self tests or quizzes (56%) or formal assessments (55%). Half of providers are using unmodified paper-based materials (49%) or modified paper-based materials (51%) in electronic format. Compared to 2005 fewer providers appear to be using learning resources that include:

- internet web-links;
- self-test or quizzes;
- modified paper-based materials in electronic format.

- 4.13 The high proportion of respondents not answering the question this year (19%) compared to 2005 (5%) may explain this difference.

Table 4.5: Content of providers' networked or standalone resources

| Content | % of respondents* (2006) | % of respondents* (2005) |
|-------------------------------------------------------------|--------------------------|--------------------------|
| Internet web-links | 59% | 71% |
| Self-tests or quizzes | 56% | 71% |
| Formal assessments | 55% | Not asked |
| Modified paper-based materials in electronic format | 51% | 63% |
| Unmodified paper-based materials in electronic format | 49% | 54% |
| Video or audio clips | 35% | 38% |
| Game type activities | 29% | 31% |
| Simulations | 18% | 20% |
| Online discussion/chat facilities | 12% | 10% |
| Role play situations | 7% | 12% |
| Don't know | 19% | 5% |
| Base: All providers using standalone or networked resources | 142 | 241 |

* Multiple responses.

- 4.14 The majority of providers (73%) are using commercial e-learning resources and over half (53%) have developed their own resources in-house. Just 15% have developed resources in partnership with others. Compared with 2005 fewer providers are using commercial bought-in products, learndirect materials or materials produced by industry or trade bodies.

Table 4.6: Sources of networked or standalone resources

| Source | % of respondents* (2006) | % of respondents* (2005) |
|-------------------------------------------------------------|--------------------------|--------------------------|
| Commercial bought-in | 73% | 81% |
| Developed in-house | 53% | 53% |
| Industry or trade bodies | 22% | 39% |
| Developed in partnership | 15% | 19% |
| Learndirect | 14% | 23% |
| National learning network | 12% | 15% |
| Don't know | 6% | 5% |
| Base: All providers using standalone or networked resources | 142 | 241 |

* Multiple responses.

- 4.15 The majority of providers have funded the development of standalone or networked e-learning resources out of their organisation's own budget (81%) and over one third (38%) diverted existing resources such as staff time. Their own budget was the main funding source for two thirds of providers (63%) developing their own e-learning resources. Only a minority have received direct public funding to support the development of resources. Just under one third (30%) have received LSC funds and this was the main source of funds for 16% of providers. A further 12% received European funding, but this was the main source of funds for just 1%.

Table 4.8: Sources of funding for e-learning resources developed

| Funding sources | All sources used % of respondents* | Main sources used % of respondents |
|------------------------------------------------------------------|---------------------------------------|---------------------------------------|
| Our organisation's own budget | 81% | 63% |
| Existing resources | 38% | 8% |
| LSC | 30% | 16% |
| European funding | 12% | 1% |
| RDA funding | 5% | 1% |
| Industry funding | 3% | 0% |
| Other | 2% | 2% |
| Don't know/no answer | 8% | 8% |
| Base: Providers developing e-learning in-house or in partnership | 87 | 87 |

Multiple responses

- 4.16 A similar pattern of funding was reported in 2005, although more providers are now funding the development from their own resources.

Table 4.8: Sources of funding for e-learning resources developed

| Funding sources | % of respondents (2006)* | % of respondents (2005) |
|------------------------------------------------------------------|-----------------------------|----------------------------|
| Our organisation's own budget | 81% | 86% |
| Existing resources | 38% | 21% |
| LSC | 30% | 28% |
| European funding | 12% | 11% |
| RDA funding | 5% | 3% |
| Industry funding | 3% | 4% |
| Other | 2% | 7% |
| Base: Providers developing e-learning in-house or in partnership | 87 | 137 |

*Multiple responses

- 4.17 The responses to the survey suggest that developing e-learning resources in-house may not always be financially viable. Nearly one quarter (24%) of providers that have developed e-learning resources in-house or in partnership report that neither future income nor cost savings will cover the costs of their development. However, 44% expect to cover their costs either through future income, reduced costs or a combination of both. Fewer providers than 2005 report that they will not cover their costs through future income or cost savings, however comparison are difficult as nearly one third of respondents this year did not answer the question.

Table 4.9: Will future income or cost savings cover the costs of e-learning resources developed?

| How costs will be covered | % of respondents (2006) | % of respondents (2005) |
|------------------------------------------------------------------|-------------------------|-------------------------|
| Neither future income or cost savings | 24% | 34% |
| Both future income and cost savings | 23% | 24% |
| Future income only | 15% | 18% |
| Cost savings only | 6% | 18% |
| Don't know/No answer | 32% | 7% |
| Base: Providers developing e-learning in-house or in partnership | 87 | 137 |

Effectiveness of learning resources

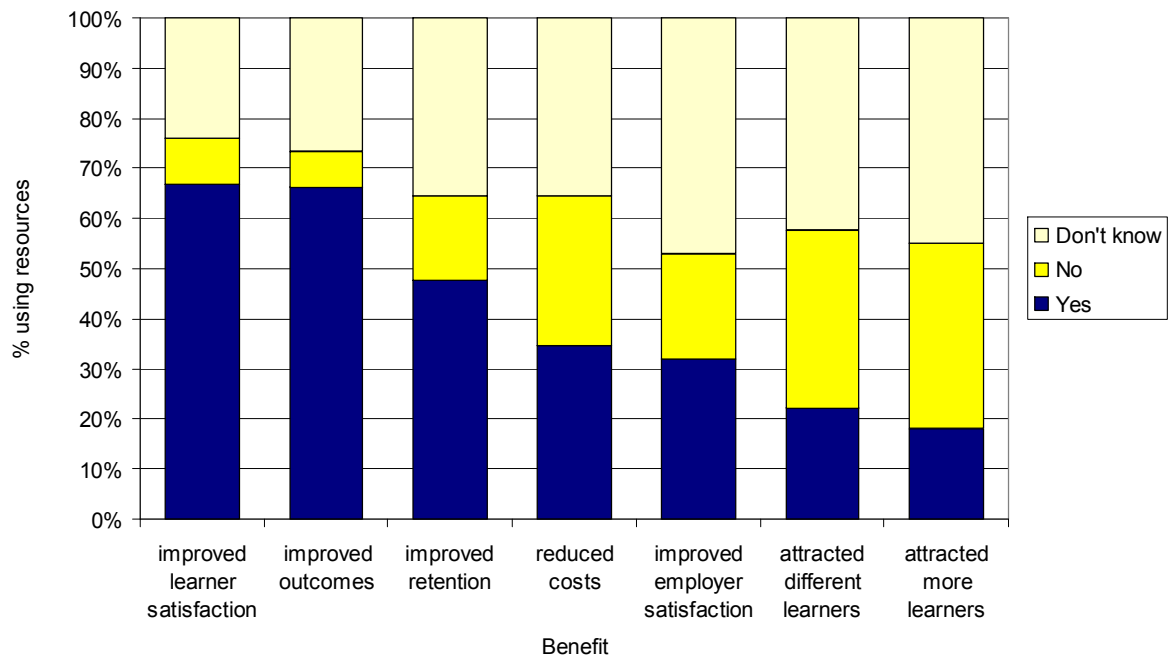
- 4.18 Three quarters of providers (75%) using standalone or networked resources over the last 12 months, whether developed in-house or externally, believe that they are effective in helping learners learn. Just 3% believe they are ineffective and 19% are unsure. Slightly more providers believe these resources to be effective in 2006.

Table 4.10: Effectiveness of standalone or networked resources in helping learners learn

| Effectiveness | % of respondents (2006) | % of respondents (2005) |
|-------------------------------------------------------------|-------------------------|-------------------------|
| Very effective | 28% | 15% |
| Effective | 47% | 56% |
| Unsure | 19% | 21% |
| Not effective | 3% | 0% |
| Not effective at all | 0% | 0% |
| Don't know | 4% | 9% |
| Base: All providers using standalone or networked resources | 142 | 241 |

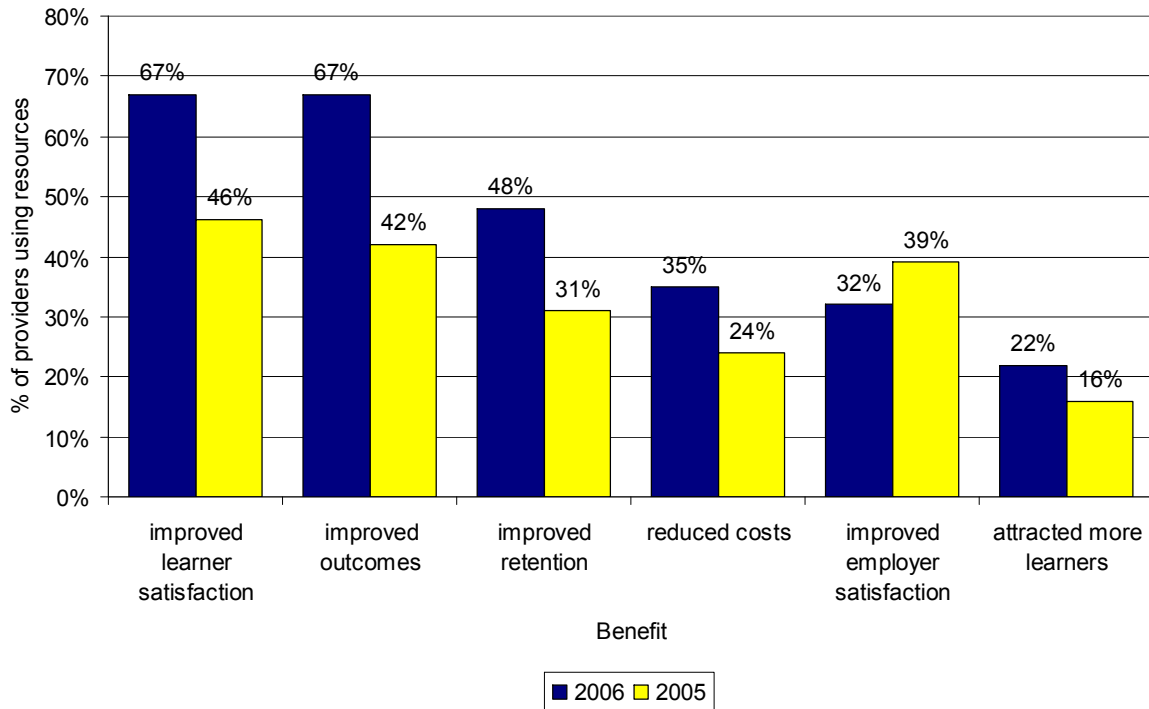
- 4.19 Providers were asked to identify the benefits of using standalone or networked e-learning resources compared with more traditional learning resources. Two thirds of providers (67%) report that they have improved learner satisfaction and a similar number report that they have improved outcomes. Just under half (48%) report that they have improved retention. Fewer providers believe that using these resources has helped attract more (22%) or different learners (32%) or reduced costs (35%).

Figure 4.5: Benefits of using electronic learning resources compared with traditional resources



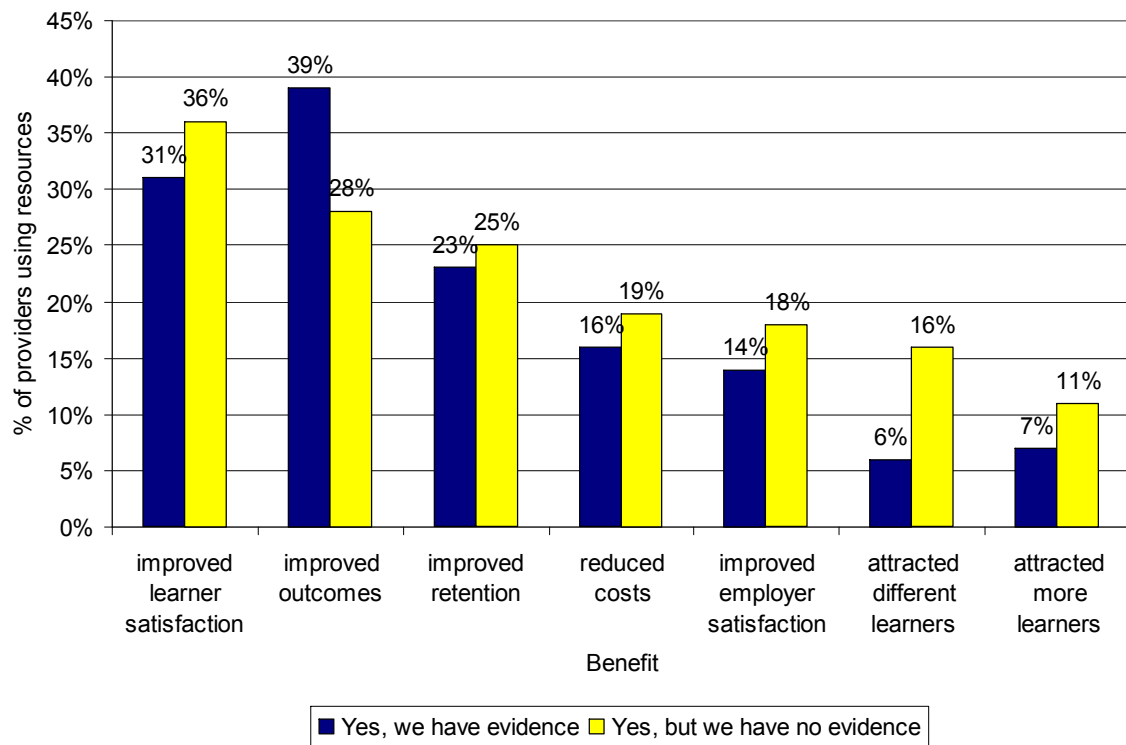
- 4.20 The proportion of providers reporting benefits is larger than last year. There has been a particular increase in providers identifying improved learner satisfaction, outcomes and retention. These are typically easier to measure than the other benefits listed.

Figure 4.6: Benefits of using electronic learning resources compared with traditional resources (2005 and 2006 compared)



- 4.21 This increase may be because more providers have now implemented or embedded e-learning and are therefore more able to identify the benefits. A larger proportion of providers than last year report having evidence to show these benefits, suggesting that the evidence base is growing. Nevertheless, a significant number of providers do not know what benefits they have gained from using electronic learning resources and with the exception of improved outcomes over half of those identifying other benefits do not have any evidence to show that they have gained the benefits they think they have. When this is combined with the evidence presented earlier showing that many providers do not know how they will cover the costs of developing resources it suggests there is still much to do in terms of understanding the financial viability and benefits of e-learning.

Figure 4.7: Providers with evidence of benefits of e-learning



5. Barriers and support identified

5.1 In this section we present the barriers work-based learning providers have identified to the use of ICT and e-learning and report some of the support they would find helpful.

Barriers to the use of ICT

5.2 Nearly half of providers (47%) identify a lack of skills amongst staff as a barrier to their organisation's use of ICT to manage or deliver learning in the next two years. However, just 8% report this as the main barrier to its use. Other barriers identified include:

- time to investigate or implement e-learning (40%). Most providers (18%) identified this as the main barrier;
- lack of knowledge about its potential use and implementation (35%). This was the main barrier for (13%) of providers;
- employers' ICT infrastructure (32%), although this was the main barrier for just 5% of providers;
- lack of suitable e-learning material (30%). This was the main barrier for 9% of providers.

Table 5.1: Barriers to the use of ICT to manage or deliver learning in the next two years

| Barrier | All barriers % of respondents* | Main barrier % of respondents |
|--------------------------------------------------------------|--------------------------------------|-------------------------------------|
| Lack of skills amongst staff to implement e-learning | 47% | 8% |
| Time to investigate or implement e-learning | 40% | 18% |
| Lack of knowledge about its potential use and implementation | 35% | 13% |
| Employers' ICT infrastructure | 32% | 6% |
| Lack of suitable e-learning materials | 30% | 9% |
| Lack of demand from employers | 28% | 5% |
| Our organisation's ICT infrastructure | 23% | 6% |
| Lack of demand from learners | 23% | 2% |
| Our ability to provide ICT technical support | 20% | 3% |
| Insufficient return on our investment | 18% | 4% |
| Other | 13% | 8% |
| Don't know | 14% | 19% |
| Base: All respondents | 171 | 171 |

*Multiple responses

- 5.3 Similar barriers were identified in the 2005 survey, although this year slightly fewer providers identify lack of time and a lack of suitable e-learning materials as barriers.

Table 5.2: Barriers to the use of ICT to manage or deliver learning in the next two years (2006 and 2005)

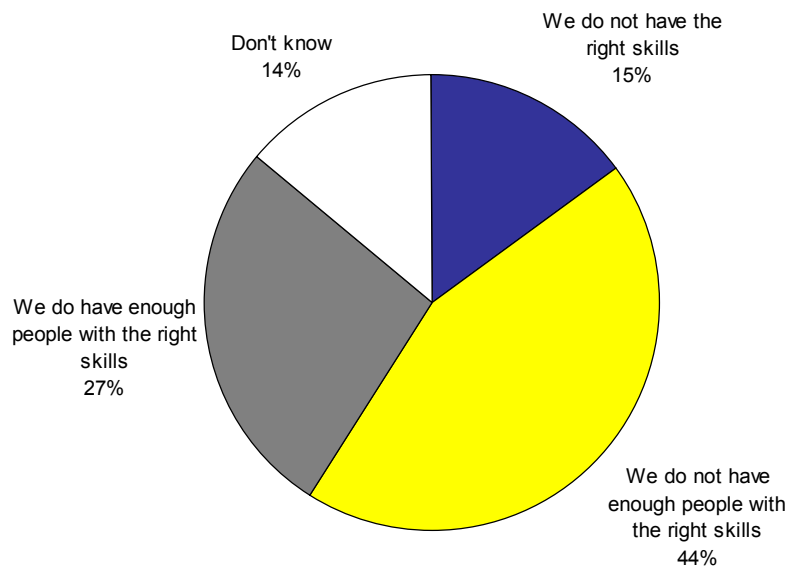
| Barrier | % of respondents* (2006) | % of respondents* (2005) |
|--------------------------------------------------------------|--------------------------------|--------------------------------|
| Lack of skills amongst staff to implement e-learning | 47% | 50% |
| Time to investigate or implement e-learning | 40% | 51% |
| Lack of knowledge about its potential use and implementation | 35% | 32% |
| Employers' ICT infrastructure | 32% | 32% |
| Lack of suitable e-learning materials | 30% | 39% |
| Lack of demand from employers | 28% | 25% |
| Our organisation's ICT infrastructure | 23% | 26% |
| Lack of demand from learners | 23% | 15% |
| Our ability to provide ICT technical support | 20% | Not asked |
| Insufficient return on our investment | 18% | Not asked |
| Don't know | 14% | 11% |
| Base: All respondents | 171 | 271 |

*Multiple responses

Staff ICT skills

- 5.4 Providers were asked whether they have a gap between the skills they believe their workforce needs to deliver and support learning effectively using ICT and the skills they actually have. Nearly two thirds (60%) of providers report that they have a skills gap. For nearly half of providers (44%) the gap is in terms of not having enough people with the right skills. Around one sixth (15%) report not having the right skills at all.

Figure 5.1: Is there a gap between the skills your workforce needs to deliver or support learning using ICT and the skills they have?



- 5.5 Just under half of providers identified a skills gap amongst their workforce in the areas of teaching and facilitating online (46%), the use of specialist software (43%), developing electronic materials (42%) and of knowledge of how to best use ICT resources (42%).

Table 5.3: Type of skills gap

| Skills gap | No. of respondents* | % of respondents* |
|------------------------------------------------------------------|---------------------|-------------------|
| Teaching and facilitating on-line | 80 | 47% |
| Using specialist software packages | 74 | 43% |
| Knowledge of how to best use ICT resources | 72 | 42% |
| Developing electronic learning materials | 71 | 42% |
| Knowledge of how to use ICT to manage learning | 56 | 33% |
| General ICT skills such as using word-processing or spreadsheets | 51 | 30% |
| Knowledge of how to access ICT based learning resources | 47 | 28% |
| Using ICT face-to-face with students | 40 | 23% |
| Using ICT to develop paper-based learning materials | 30 | 18% |
| Don't know/No answer | 39 | 23% |
| Base: All respondents | 171 | 100% |

*Multiple responses

- 5.6 Just under one third of providers (31%) believe there are no barriers to addressing their skills gap and are addressing it. The main barriers identified are a lack of time to identify or undertake the training (45%) or lack of resources to pay for training (38%).

Table 5.4: Barriers to addressing the skills gap.

| Skills gap | No. of respondents* | % of respondents* |
|------------------------------------------------------|---------------------|-------------------|
| Lack of time to identify or undertake the training | 77 | 45% |
| Lack of resources to pay for training | 65 | 38% |
| Lack of quality training available | 24 | 14% |
| Staff reluctance to learn to use ICT | 24 | 14% |
| Lack of staff access to necessary ICT infrastructure | 22 | 13% |
| Lack of access to quality training | 17 | 10% |
| Don't know where to look for training | 14 | 8% |
| Not a business priority | 12 | 7% |
| Don't know/No answer | 38 | 22% |
| We are addressing our skills gap | 53 | 31% |
| Base: All respondents | 171 | 100% |

*Multiple responses

Future support

- 5.7 Providers were asked to identify what support, that they do not already have access to, would help their organisation use ICT more efficiently or effectively. Around half of providers think information and advice about e-learning products (50%), training for tutors or assessors (49%) and information and advice about how to use ICT to deliver learning (45%) would be useful.

Table 5.5: Support that would help providers use ICT more effectively or efficiently

| Support | No. of respondents* | % of respondents* |
|------------------------------------------------------------|---------------------|-------------------|
| Information and advice about e-learning products available | 86 | 50% |
| Training for tutors and assessors | 83 | 49% |
| Information and advice about using ICT to deliver learning | 77 | 45% |
| Information and advice about using ICT to manage learning | 62 | 36% |
| Information about good practice | 58 | 34% |
| Training for management staff | 55 | 32% |
| Bespoke business advice relating to the use of ICT | 37 | 22% |
| Strategic or business planning support | 24 | 14% |
| Don't know/No answer | 24 | 14% |
| Base: All respondents | 171 | 100% |

*Multiple responses

- 5.8 Nearly two thirds of providers say they are likely to look to the LSC to provide this support (60%) and around two fifths are likely to look to ALP (39%) or private suppliers (40%). Few providers are likely to look to the JISC Regional Support Centres (7%) or Becta (11%).

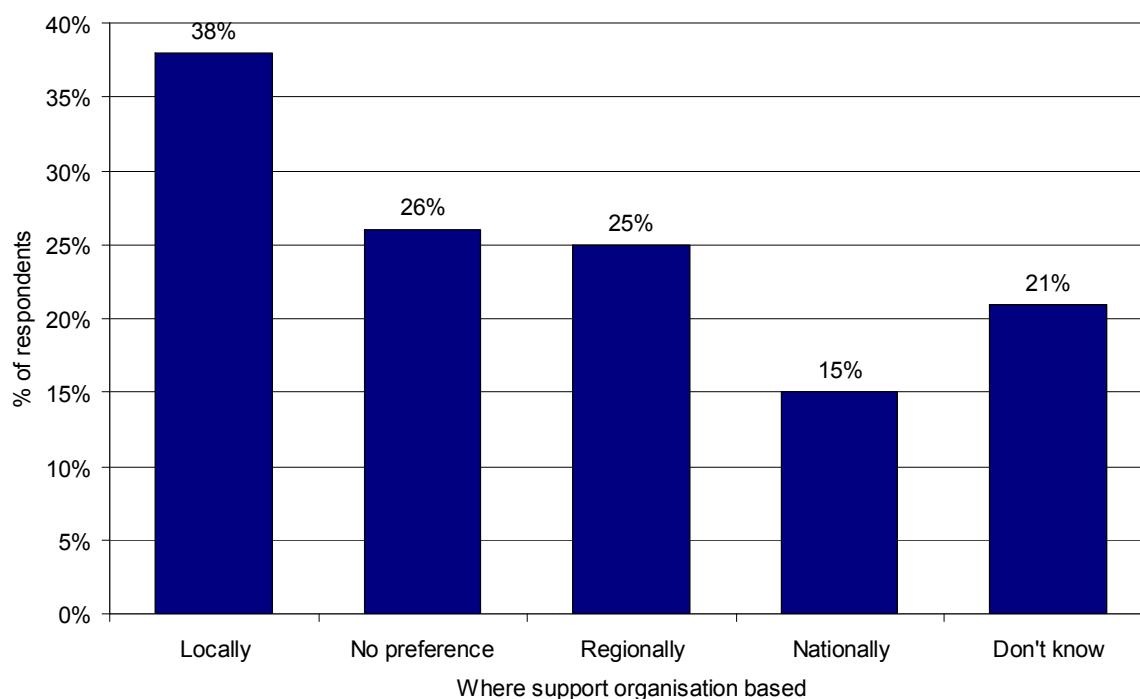
Table 5.6: Where providers are likely to look for this type of support?

| Organisation | No. of respondents* | % of respondents* |
|---------------------------------------------------------------------|---------------------|-------------------|
| Learning and Skills Council (LSC) | 102 | 60% |
| Private suppliers | 69 | 40% |
| Association of Learning Providers (ALP) | 66 | 39% |
| LSDA | 59 | 35% |
| Web-based resources | 59 | 35% |
| Other providers | 39 | 23% |
| Business Link | 30 | 18% |
| British Educational Communications and Technology Agency (Becta) | 19 | 11% |
| Joint Information Support Committee (JISC) Regional Support Centres | 12 | 7% |
| Don't know/No answer | 19 | 11% |
| Base: All respondents | 171 | 100% |

*Multiple responses

- 5.9 Just under two fifths of providers (38%) would prefer to access this support from organisations based locally, although a quarter (26%) have no preference.

Figure 5.2: How providers would prefer to access support



6. Conclusions

- 6.1 This is the second survey investigating the use of ICT and e-learning by work-based learning providers. Our analysis suggests that, despite a slightly different methodology and fewer responses, respondents to this year's survey represent a wide cross section of providers and are similar in characteristics to the providers responding to the 2005 survey.
- 6.2 We therefore conclude that the two surveys are broadly comparable in terms of the characteristics of respondents and have based our conclusions on this assumption. However, caution needs to be taken when comparing small percentage changes between the two years because of the size of the sample.

Approaches to ICT support and delivery of learning

- 6.3 The survey suggests work-based learning providers are developing a more structured and informed approach to the use of ICT and e-learning. It shows that:
- there has been an increase in the number of providers that believe they have a good knowledge of e-learning. This may reflect the increasing number of providers with evidence about the effectiveness of electronic learning resources and the increase in providers that have moved on from piloting e-learning activities to embedding them;
 - the majority of providers have a written strategy that includes how they intend to use ICT to manage, support or deliver learning. The proportion of providers without at least one of these written strategies (16%) has nearly halved compared to last year.
- 6.4 Increased knowledge and a more strategic focus appear to have led to greater clarity about the use and benefits of ICT and e-learning. Providers:
- are taking a blended approach to the use of ICT to deliver learning. Over the last year fewer providers anticipate using ICT to deliver whole modules;
 - have expectations about the benefits of e-learning that match the reported evidence. Providers expect and report the main benefits to be associated with the quality of the learning delivered and as a result improve satisfaction, outcomes and retention. We do not know whether these benefits are being highlighted just because they are easy to measure;
 - are equally as likely as last year to develop their own resources in-house, but are now more likely to use networked than standalone learning resources.

- 6.5 However, a significant minority of providers are further behind in their knowledge and use of ICT and e-learning. Similar numbers of providers to last year report that they are not using ICT and e-learning and have little or no knowledge.
- 6.6 The survey also suggests there is further work to be undertaken to understand the financial viability of, and benefits of e-learning. A significant number of providers that have used electronic learning resources do not know what benefits they have gained and over half of those that have developed resources in-house believe they will not recover the costs of their development or do not know if they will. This is an area of particular concern for providers given the majority are investing their own resources in the development of electronic learning resources.

The use of ICT

- 6.7 Work-based learning providers have invested substantially in their ICT infrastructure:
- nearly all have (85%) computers and fast internet access for their learners on their premises. This is an increased number compared with last year;
 - over one quarter (28%) have developed a dedicated website to support learners. An increase from 19% last year;
 - 15% are using mobile devices such as PDAs and mobile phones for learning.
- 6.8 Providers are most commonly using ICT as a tool for registering, assessing and monitoring learners or for helping tutors to develop paper-based learning materials. Increasingly providers are using ICT to:
- help assess the initial skill needs of work-based learners;
 - help monitor work-based learners' progress;
 - help learners monitor their own progress.
- 6.9 There is also a slight increase in the use of ICT to:
- provide tutor support to work-based learners;
 - support collaboration between learners.

Future barriers and support for ICT and e-learning

- 6.10 Most providers identify a lack of skills amongst staff to implement e-learning as a barrier to its future use, although it is not the most critical factor. Providers feel the main barriers are a lack of time and knowledge, employers ICT infrastructure and suitable e-learning materials.

- 6.11 For the majority of providers with a skills gap in their workforce this gap is related to the number of people with the right skills rather than the lack of a particular skill. Over the last 12 months, providers appear to have increased their activity in terms of providing on-line tutor support and supporting on-line collaboration and this may have led nearly half of them to identify a skills gap in terms of teaching and facilitating on-line. The other main areas where there are skills gaps relate to the use of specialist software packages as well as knowing how to best use ICT resources and how to develop their own materials. Time and resources are the main barriers to providers addressing this skills gap.
- 6.12 Providers would find additional support helpful in the form of more training for tutors and assessors and more information and advice about e-learning products and how to deliver e-learning. Providers are looking to the LSC, ALP and private suppliers to meet these needs.

Appendix A

Questionnaire