

Construction Industry Training Board (NI)  
Research into Training and Skills Needs  
Final Report  
February 2007



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# Acknowledgements

We would like to express our thanks to representatives of the 508 companies who willingly took part in our survey and particularly to the representatives of the firms, and industry stakeholders, who provided us with in-depth interviews on their views and experience of training within the Northern Ireland construction industry as part of our research.

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# Foreword

Construction is the UK's biggest industry with more than 2 million employees, an estimated 80,000 of whom are employed in the Northern Ireland construction industry.

The industry is enjoying particularly strong growth in Northern Ireland, but there are challenges ahead. The Investment Strategy for Northern Ireland (ISNI) has pledged almost £16 billion of new infrastructure over the next decade. When combined with the Republic of Ireland's National Development Plan (NDP), the Island of Ireland will benefit from an unprecedented €100 billion of infrastructure investment.

The Northern Ireland construction industry is on the move and adding value as well as employment to the local economy. In 2005, construction output in the province was worth £2.1 billion at 2000 prices and the sector's output is forecast to grow at an average annual rate of approximately 4% between 2007 and 2011. Consequently, total employment in the Northern Ireland construction industry is set to increase by almost 11% between 2007 and 2011.

Our industry needs to be ready; not just to capitalise on these exciting opportunities, but to do so efficiently, effectively and in a manner that will portray construction and its allied trades as a profession of choice for school-leavers, graduates and returners, regardless of gender, ethnicity and background.

This survey will be a great help in our preparation for the future. It is the most comprehensive and far-reaching survey of the construction industry, ever undertaken in Northern Ireland. It has been enthusiastically welcomed by key industry stakeholders and the high level of response to the survey team illustrates the commitment of the industry to contribute to its future.

The survey is more than a mere snapshot of the Northern Ireland construction industry; it is a comprehensive portrait of a diverse and complex sector with many strengths, some weaknesses and a growing number of challenges. It portrays a large industry, but with many small players. An industry where we under-invest in apprentices and training and where potential recruits – and particularly women – hold a perception of the industry as unattractive and lacking in career progression. Addressing these issues is amongst our greatest challenges.

This publication gives a real insight into our industry and is a benchmark against which we should measure ourselves in the future. I am indebted to all 508 companies that took time to participate in the survey and those who willingly gave of their time for the workshops. Their time has been well invested.

This industry is doing well; but it can, and must, do better.



**Allan McMullen**  
Chief Executive CITB (NI)

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# 1 Executive summary

## Background

- 1.1 Improving skills for employment amongst the general workforce has been a government policy goal since Labour came to power in May 1997. Despite the importance given to raising the skills set of the economy, there are still concerns that skills gaps are present within the construction industry.
- 1.2 The Construction Industry Training Board (CITB) in Northern Ireland (NI) is working in partnership with CITB-ConstructionSkills and the Construction Industry Council (CIC) as ConstructionSkills, the Sector Skills Council (SSC) for the UK construction industry.
- 1.3 ConstructionSkills is one of 25 independent Sector Skills Councils set up by Government in 2003. SSCs are intended to be UK-wide employer led organisations with the broad remit of tackling the skills and productivity needs of industry in the UK.
- 1.4 ConstructionSkills' overriding aim is to ensure the training and learning infrastructures across the UK reflect the needs of the industry in terms of quantity, quality and location of training, mode of learning and funding mechanisms. The three specific strategic objectives of ConstructionSkills across the UK are:
  - Improving business performance (supporting companies to plan ahead and regard investment in learning and skills as essential to improving business performance);
  - Qualifying the existing workforce; and
  - Recruiting new entrants (ensuring an adequate supply of industry-ready entrants at all levels to address current and future recruitment needs).
- 1.5 Recognising that skills levels play a vital role in raising productivity and increasing competitiveness, the Department for Employment and Learning (DEL) published its '*Skills Strategy for Northern Ireland*' in February 2006. The Strategy focused on raising essential, employability and work-based skills in Northern Ireland by establishing a clearer set of goals and action plans. A key building block of this strategy was to identify the demand-driven needs of the local economy. As such, the use of Labour Market Information and Research to improve the understanding of the demand for skills was identified as a key action.
- 1.6 Locally, CITB (NI) is committed to the ongoing training and development of both the existing workforce and of new entrants entering the Northern Ireland construction industry for the first time.
- 1.7 Consequently, CITB (NI) has commissioned PricewaterhouseCoopers LLP (PwC) to undertake a programme of employer-based research with representatives of the construction industry in Northern Ireland in order to augment the sector intelligence research previously undertaken by CITB (NI); which in turn, will help to inform future strategic policy.
- 1.8 This report presents the highlights and represents a small selection drawn from a huge range of data available to CITB (NI), based on the information captured through one of the largest surveys ever undertaken within the Northern Ireland construction industry.

## Terms of reference

- 1.9 The overarching aim of the research was to gather up-to-date information to provide an insight into each of the following:
- Skills gaps and skills shortages;
  - The variety and sources of learning and training used by employers;
  - Employer attitudes and motivation towards learning and training;
  - New entrant information;
  - Migrant workers; and
  - The provision of an industry profile in terms of company size and type of work undertaken.
- 1.10 The specific objective of the research was to inform the development and improvement of learning and training provision and delivery, through the identification, quantification and analysis of each of the following:
- The level of skills gaps and skills shortages within the NI construction industry;
  - The preferred methods and sources of learning and training provision;
  - The barriers, as well as the drivers and motivators, behind the decision to provide and/or access continued learning and training;
  - The sources of new entrants to the industry, the training carried out by new entrants and employer attitudes to the employment of new entrants;
  - The levels of migrant workers employed in the construction industry and the implications in terms of training needs and provision; and
  - The composition of the NI construction industry in terms of main company activity, gender and occupational profile of employees.

## Our approach

- 1.11 A dual methodology consisting of both qualitative and quantitative research was used for this particular study. This approach combines the statistical rigour of a quantitative survey with the additional insight obtained through qualitative discussion workshops. The primary research was conducted over a three month period from June to September 2006.
- 1.12 An initial phase of desk research was undertaken to identify previous studies conducted in the area of training and skills needs and/or development. The information obtained from the desk research was subsequently used to inform the qualitative and quantitative phases of the project.
- 1.13 The first qualitative session was held with employers representing various facets of the construction industry. The information acquired during this exercise was used to help design the questionnaire used for administering the quantitative survey.
- 1.14 The subsequent phase of the qualitative research was a series of depth-interviews undertaken with key stakeholders of the Northern Ireland construction industry. Once again, the information obtained during the depth-interviews was used to further inform the questionnaire design phase of the quantitative survey.
- 1.15 The quantitative survey was undertaken using a telephone methodology. Based on previous experience of conducting research within the construction industry, a telephone methodology was considered to be the most economical and efficient method of conducting the research. The initial target of 500 completed interviews was exceeded, with 508 interviews completed at the end of the fieldwork period. Over 3,000 telephone calls were made to firms within the construction industry to achieve the 508 interviews, thus representing a strike rate of 1 in 6. The strike rate for this survey was better than that of previous studies undertaken within the sector which would typically stand at one successful interview for every 10 calls made. This

would suggest that the industry is willing to support research which seeks to improve the standards and/or service delivery within the construction industry.

- 1.16 The final stage of the assignment was a post-survey qualitative workshop conducted with representatives from the CITB (NI) Board and Committee members. The aim of the workshop discussion was to obtain the views and opinions of the participants with respect to the training and skills needs of the industry; and how these compared with the views of the respondents included within the survey.

## Key findings

### Company profile

- 1.17 The profile of firms, in terms of employee size, closely reflected that of the overall population of the Northern Ireland construction industry. Approximately 21% of all respondents surveyed did not have any direct employees. Just over 40% stated that they have between one and four employees, with a further 27% reporting to have between five and nineteen employees. Just under 10% of respondents stated that they currently employ 20 or more individuals within their company.
- 1.18 Almost one-fifth of all firms surveyed were from the building services engineering sector, with approximately 10% of respondents representing each of the following sectors: general building contracting, joinery and house building. The remainder was made up of various sectors including, plastering and painting and decorating.
- 1.19 Based on the information provided by respondents, PwC calculated that almost 60% of all employees included within the survey were employed within the craft/trade occupations. Just over 10% were employed within a managerial/supervisory function, with 18% employed within a professional/technical capacity.
- 1.20 In addition it was estimated from the survey findings that 10% of the total workforce was female. This corresponds closely with the 11% stated within the DETI's Northern Ireland Quarterly Employment Survey Supplement<sup>+</sup> findings published in 2006.
- 1.21 Almost 80% of the female population within the construction industry were employed in a clerical capacity, with only 7% employed within the craft/trade occupations. Just over 10% of all females had managerial/supervisory roles, with even fewer (3%) operating in a professional/technical role.

- Females accounted for 10% of total workforce, with the vast majority (79%) performing a clerical role.

### Skills shortages, gaps and hard to fill vacancies

- 1.22 When questioned, almost 70% of respondents were of the opinion that their current workload was sufficient for their existing workforce. Just over 20% of respondents believed that they did not have enough skilled workers to accommodate the current workload; whilst a small proportion (7%) stated the contrary in that they did not have enough work for their existing workforce.
- 1.23 In terms of recruitment experiences over the past year, just under half (46%) reported that they had not recruited during the past 12 months. Whilst approximately 20% of respondents had undertaken a successful recruitment campaign without difficulty, approximately 30% of respondents reported that they did experience difficulty during their recruitment programme.

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<sup>+</sup>Northern Ireland Quarterly Employment Survey Supplement, Department of Enterprise Trade and Investment (NI). Published March 2006.

- 1.24 Of those respondents that did experience recruitment problems, approximately one-third reported that general operatives/labourers were difficult to source. Just less than 20% held the view that recruiting staff from the wood trades was difficult, with approximately 10% stating plasterers, bricklayers and plumbers as difficult to source occupations.
- 1.25 The main reasons highlighted by respondents for the difficulties experienced during the recruitment process were the lack of applicants with the required skills (48%), an insufficient number of applicants with the required experience and/or qualifications (28%) and a lack of interest in the particular job type (23%).
- 1.26 Of those firms that had experienced difficulties recruiting in the last year, over 60% had indicated that the applicants applying for the positions advertised lacked practical/technical or job-specific skills. Moreover, only 5% believed that the problem was a result of a lack of literacy/numeracy ability.
- 1.27 When questioned if current staff lacked the skills required to perform their job to their maximum potential, only 5% of respondents stated 'yes'. It was further calculated that this represents 2% of the total workforce having a skills gap.
- 1.28 Participants of the qualitative workshop, however, were of the opinion that this is just the tip of the iceberg and that they could think of a development need for all of their employees. The group also stated that employers often think only in terms of the basic or mandatory training required and not necessarily in terms of the continuous development when they are questioned on the subject of training or training provision.
- 1.29 Those respondents stating that skills gaps existed within their firm (33 firms) were asked to indicate which skills required improvement. The overwhelming majority (67%) were of the opinion that technical/practical or job-specific skills required improvement, followed by management skills (12%) and IT skills (12%).

- Approximately 30% of all respondents encountered recruitment difficulties over the past 12 months.
- Of such respondents, the majority (31%) reported that general operatives/labourers were difficult to recruit.
- Over 60% of firms who had experienced recruitment difficulties stated that the applicants did not possess the technical/practical or job-specific skills required.
- 2% of the total workforce was reported to have gaps in their skills base; with technical/practical or job-specific skills highlighted as the main area for improvement.

### **Apprentices and trainees**

- 1.30 29% of all construction firms surveyed currently have apprentices or trainees on formal training programmes which lead to recognised qualifications.
- 1.31 Of those respondents that currently have apprentices or trainees on formal training programmes, approximately 40% reported that their main reason for taking on apprentices and/or trainees was to provide more workers/craftspeople for the future. A further 25% believed that the shortage of skilled workers has resulted in the need to take on apprentices/trainees as additional resources. 'Tradition or habit', 'to help the industry' and 'as a favour to friend/relative' were also cited by over 10% of respondents as the primary reason for taking on apprentices/trainees.

- 1.32 Of the 136 firms that currently have apprentices and/or trainees attending college, just under half (45%) stated that they were satisfied with the training provided by the college or training provider. A further 29% reported that they were neither satisfied nor dissatisfied and 20% cited that they were dissatisfied with the training provision.
- 1.33 Of those that do not currently have apprentices or trainees, approximately one-third have adopted this position as they believe there is no need to do so at the present time. Almost 20% reported that apprentices and/or trainees are 'more hassle than they are worth', with a further 12% stating 'the company is too small to take on apprentices'.
- 1.34 For those that do not have apprentices or trainees at present, greater financial incentive was reported as the main way in which to encourage such respondents to take on apprentices or trainees in the future (24%). A further 17% of respondents reported that apprentices would be recruited if the workload of the company was to increase.
- 1.35 Improvements in the motivation levels and reliability of the candidates would be a key driver for an additional 15% of respondents to take on apprentices or trainees. Moreover, high quality training courses would help to encourage a further 8% of respondents. Approximately one-fifth of respondents firmly believed that nothing would encourage them to recruit apprentices.

- Just under 30% of all respondents currently have apprentices or trainees on formal training courses.
- 20% of firms that currently have apprentices and/or trainees at college were dissatisfied with the quality of training provided to apprentices by colleges and/or private training providers.
- The majority of those dissatisfied reported the need for more practical-based training. This was also supported by the qualitative findings.
- A greater financial incentive was cited as the main form of encouraging firms to recruit apprentices.

### **Recruitment of new employees**

- 1.36 It was calculated that 20% of the existing workforce was recruited over the past year. However, it is not possible to say whether or not this is as a result of expansion within the industry or the replacement of staff as a result of employees leaving the firm. Respondents were not asked to provide the number of staff that had left the firm over the past 12 months.
- 1.37 The overwhelming majority of newly recruited staff over the past year (59%) were experienced and/or qualified workers. 16% of recruits were recruited via apprenticeships or training programmes, with an additional 16% entering the industry without any previous experience. Only 8% of new employees were recruited through college or university non-apprenticeship routes.
- 1.38 When questioned on the likelihood of taking on apprentices and/or trainees in the next three years, 37% of all firms, irrespective of whether they currently have apprentices and/or trainees, reported that they are either very likely or quite likely to do so. In contrast, almost 45% of respondents stated that they are unlikely to take on any apprentices.

- Almost 60% of new recruits were experienced/qualified workers.
- Almost 45% of all respondents stated that they are unlikely to take on apprentices and/or trainees in the next three years.

### Training undertaken and preferred suppliers

- 1.39 42% of respondents reported that either they or their staff, excluding apprentices and/or trainees, received on-the-job training over the past year. Similarly, 45% of all firms reported that either they or their employees had received structured or formal training over the same time period. When the raw figures were analysed in terms of the total number of employees that received structured or formal training over the past year, it was calculated that 42% of the total workforce had received formal training in the last year.
- 1.40 The three main topics covered during the formal training sessions were health and safety training, as reported by 93% of all those that had provided training over the past year, the use of new materials and/or techniques (45%) and induction training (41%).
- 1.41 Of those firms that had provided training to their workforce in the last year, almost 60% had provided training delivered by a private training provider. Just over 40% reported that they had provided training delivered by TASC (Training and Assessment Services for Construction), CITB (NI)'s direct training division. Approximately 30% reported that they had provided training to staff in the form of self-paced learning including books and CD-Roms. A further 20% cited that their workforce had received formal training directly from a manufacturer or supplier.
- 1.42 Satisfaction with the quality of training provided by the majority of the aforementioned training mechanisms was very positive, particularly in relation to the training delivery by TASC.
- 1.43 64% of firms with staff that had received training over the past year stated that they were satisfied with the range and relevance of training provided locally. On the contrary, a significant proportion (12%) stated they were dissatisfied.

- Just over 40% of all respondents reported that they, or their employees, had received on-the-job training in the last year.
- It was calculated that 42% of the total workforce had received structured or formal training over the past year.
- The training undertaken was primarily in the areas of health and safety (93%), the use of new materials and/or techniques (45%) and induction training (41%).

### Barriers and motivators to training

- 1.44 The survey findings indicated that legislation was the primary factor in influencing the decision to provide training for staff, with 52% of respondents stating this reason. Approximately 20% of respondents reported that staff health and safety and the professional development of employees were the key reasons for providing training.
- 1.45 Only 10% of respondents referred to the economic benefits of training in terms of increased productivity, increased competitiveness or operational effectiveness of the business.
- 1.46 For those that have provided training, a highly skilled workforce (26%) or reductions in the number of accidents at work (24%) were cited as the principal benefits that training has brought to the company. Approximately 20% cited compliance with legislation and increased productivity as key benefits that training has brought to the company.
- 1.47 On the contrary, 'time constraints' was considered by the majority of respondents that have not provided training (38%) as a major deterrent to training provision. In addition, the cost of training was deemed as a significant barrier to training by approximately one-fifth of such respondents. 16% of firms that do not currently provide training to staff were of the opinion that their staff have the necessary skills to do the job required and therefore do not require training.

1.48 Of those respondents that have not provided training to staff over the past year, or have not received training themselves, one-third reported that increased funding for training provision would encourage them to provide more training. The second most common incentive was the provision of more on-the-job training (12%), followed by more flexibility with course timings/dates (7%). Approximately 40% were unable to provide a definitive response to this question.

- Of those respondents that have provided training to their workforce, 52% cited compliance with the law/legislation as the main motivation for providing training. Only 10% cited the financial benefit or improved operational effectiveness as the main incentive.
- Only 10% of respondents referred to the economic benefits of training such as increased productivity, increased competitiveness or operational effectiveness of the business.
- Of those respondents that have not provided training in the past year, 'time constraints' (38%), followed by 'the cost of training' (18%) were the key reasons for not doing so.
- One-third of firms that had not provided training to their workforce reported that 'increased funding' would be the greatest form of encouragement to do so in the future. However, it is important to note that almost 40% of respondents to this question could not offer a solution.

### **Migrant workers**

1.49 Of all firms with employees surveyed for this study (402), 16% reported that they currently employ non-national workers within their workforce. Employers were asked to exclude Republic of Ireland workers from their responses as the remit of the assignment was to investigate the proportion of non-UK and Ireland workers only.

1.50 Based on the actual number of non-national employees, as provided by respondents, it was calculated that 5% of the total workforce of those included in the study were non-national workers.

1.51 Half of all respondents that currently employ non-national workers reported that they employed Polish workers. Moreover, 27% had Lithuanian workers and 14% had Latvian workers; with the remainder coming from Slovakia, Czech Republic, Portugal, Switzerland, Brazil and Palestine.

1.52 For those firms that currently employ non-national workers, the primary reasons for doing so was the lack of UK workers (32%), followed by higher levels of motivation (21%) and non-national workers being more highly skilled (19%). Only 10% considered non-national workers as a cheaper source of labour.

1.53 Over half of those respondents that currently employ non-national workers do not believe that there have been any additional training needs as a result of hiring such staff. Contrastingly however, approximately one-quarter of such respondents reported that health and safety and language training was required as additional training.

1.54 It was calculated that approximately 37% of the non-national workforce has difficulty speaking English based on the raw figures provided by respondents. It appears that employers have primarily adopted an informal approach to dealing with the language issues such as the use of on-site translators (27%) and the use of signs/show-cards and phrase books (21%). 18% of those that employ non-national workers reported that they organised or enrolled the worker(s) in a language course.

- 5% of the total workforce included within the survey was non-national workers.
- The majority of employers reported that their non-national workers were of Polish, Lithuanian or Latvian origin.
- The key reason for employing non-national workers was the lack of UK workers.
- 37% of the non-national workforce has difficulty with the English language.

## Conclusion

- 1.55 The quantitative survey and the qualitative workshops have indicated that 'training' for most firms refers to equipping an individual with the appropriate knowledge or skill to do a particular job, or as a means of complying with current legislation, and is often reactive rather than proactive. Very few respondents appear to think of training in terms of the continuous professional development of the individual nor do they regularly think about the economic or financial benefit training can bring to a company. This study suggests that many firms view training as an expenditure, either in terms of money or time, and this is reflected in the responses provided to the barriers and motivators to training.
- 1.56 In order to encourage more training within the industry, the distinction must be made between basic or mandatory training and ongoing learning and development of the individual. It has been suggested by a number of representatives in the industry that the mindset of the sector needs to change and that the benefits of training, in terms of mutual benefit to the employee and the employer, must be clearly and effectively communicated to firms of all sizes. The communication strategy, however, should be sensitive to the financial constraints that many smaller firms face which are often perceived as a major obstacle to training provision.

## Recommendations

- 1.57 This study has generated a comprehensive set of data which can be used as a basis for the development of training initiatives and strategies in the construction industry. PwC have made some initial recommendations based on the evidence arising out of this research and these are outlined below.
- 1.58 This research has focused primarily on the demand side of the construction training market. Another key element on the formulation of a training strategy would be to undertake a programme of research on the supply side.

- We recommend that further research should be carried out on the supply of training across Northern Ireland; looking at the strengths, weaknesses, opportunities and constraints and considering best practice elsewhere.

- 1.59 Based on this study, the CITB (NI) may wish to consider initiating the process of developing an overall strategy for training for the construction industry in Northern Ireland.

- We recommend that CITB (NI) in its role as a partner in ConstructionSkills consider initiating the development of a co-ordinated strategy for training within the industry, covering all levels from apprenticeship training through to management training.

- 1.60 It is clear from the research that attitudes to training within the construction industry are not all positive. There is a need to demonstrate more clearly the benefits of training to employers. There is also an opportunity to view training as an investment in individuals rather than a necessary cost.

- We recommend that CITB (NI), in association with its stakeholders, should develop a communications strategy designed to improve employer attitudes to training. This could be based on practical case studies demonstrating the benefits to the firm of investing in training.

1.61 There is a strong view within the industry that the current training provision should have a greater balance of practical construction skills training as well as general training in areas such as basic literacy and numeracy.

- We recommend that CITB (NI) should review with training providers the content of existing training provision to ensure that it meets the needs of the industry.

1.62 There are two important minority groups within the industry – females and migrant workers; it is therefore important that training is also tailored to meet the needs of these groups.

- We recommend that CITB (NI) and its stakeholders should consider how existing training provision can be better tailored to meet the needs of females and migrant workers within the industry.

1.63 Finally, this research provides a benchmark against which subsequent progress can be measured.

- We recommend that this survey should be repeated in 2-3 years time to investigate what changes have taken place throughout the industry.

1.64 CITB (NI) is currently involved in a range of activities which address a number of the recommendations highlighted above. Further information on these areas of work can be obtained from CITB (NI).

## 2 Our approach

- 2.1 A twin-track approach of qualitative and quantitative methodologies was adopted for the current programme of research. This approach was considered the most advantageous as it permitted the capture of in-depth information via qualitative discussions but also provided statistical robustness through the use of a quantitative survey.
- 2.2 The first phase of the project involved a programme of exploratory desk research to identify previous studies conducted in the area of training and skills needs and/or development. The information obtained from the desk research was subsequently used to inform the qualitative and quantitative phases of the project.

### Qualitative research – Phase 1

- 2.3 The purpose of the qualitative element of the research was two-fold: firstly, to provide insight for the questionnaire design phase of the quantitative survey; and secondly, to permit further exploration of the issues identified by the quantitative survey.
- 2.4 The first phase of the qualitative research consisted of four in-depth qualitative interviews with representatives from the Northern Ireland construction industry. Small, medium and large firms were represented in the depth-interviews, as well as a sole trader.
- 2.5 The next phase of the qualitative research was a series of depth-interviews conducted with key stakeholders of the Northern Ireland construction industry. The four stakeholders that were incorporated in this stage of the assignment included representatives from:
  - The Construction Employers Federation;
  - The Federation of Master Builders;
  - The Department for Employment and Learning; and
  - The Association of Northern Ireland Colleges.

### Quantitative research

- 2.6 A telephone methodology was considered to be the most economical and efficient method of conducting research amongst firms in the construction industry.
- 2.7 All interviewing was conducted by PricewaterhouseCoopers' executive interviewers using PwC's in-house purpose built computer-aided telephone interviewing (CATI) suite. The fieldwork took place throughout the months of August and September 2006.
- 2.8 The target for the survey was 500 interviews, and a total of 508 were successfully completed during the fieldwork period. In order to achieve the 508 successful interviews, over 3,000 calls were made to businesses within the Northern Ireland construction industry, thus representing a strike rate of 1 in 6. The response to this survey was very positive as other surveys within this sector would typically witness a response rate of 1 in 8 or even 1 in 10.

## Sample structure

- 2.9 The sample source provided to PricewaterhouseCoopers for the recruitment of participants in both the quantitative and qualitative phases of the assignment was provided by CITB (NI). A final sample file of 3,600 names and telephone numbers were made available for the interviewing process.
- 2.10 It was agreed with CITB (NI) that the sample-frame used for the quantitative element of the assignment would be representative of the Northern Ireland construction industry as a whole in terms of employee size. It was also agreed that the sample would be stratified to ensure representation from non-levy payers as well as levy payers. As a result, direct quotas were placed on the number of employees within a company and whether or not they were a current CITB (NI) levy payer.
- 2.11 Indicative quotas were also placed on the sample structure to ensure a spread of geographic locations and main business activity of the firms interviewed. It was agreed with CITB (NI) that only firms operating within the Standard Industry Classification (SIC) code 45 would be included within the current study, therefore, professional services companies have not been included.
- 2.12 Table 2.1 highlights the proposed quota against the actual number of interviews achieved.

**Table 2.1**

Number of employees	Quota (%)	Achieved (%)	Number of interviews achieved
0	33%	21%	105
1-49	66%	78%	394
50-199	1%	1%	6
200+	<1%	<1%	2
			<b>508*</b>

Source for quota: IDBR 2004

\*One respondent refused to provide employee size.

- 2.13 Table 2.1 highlights that the current study is in line with the proportional spread of the industry in terms of employee size. The total number of firms with zero employees agreeing to participate in the study is less than the original quota as the total sample was exhausted. However, it is worth noting that the majority of the 1-49 category is made up of employers with between 1-4 employees, reflective of the small/medium size of the industry.

## Qualitative research – Phase 2

- 2.14 The final qualitative phase of the assignment consisted of a workshop with representatives of the CITB (NI) Board and Committees. A total of five Board and Committee members attended on the day the workshop was hosted. The aim of the workshop was to ascertain the views and opinions of the group in terms of the key issues investigated in the quantitative study and how these compared with the survey responses.

# 3 Key findings

3.1 This report presents the main findings from the quantitative element of the study, with highlights of the qualitative findings included where relevant. The full qualitative summary documents are not included in the main body of this report, however, they can be requested from CITB (NI).

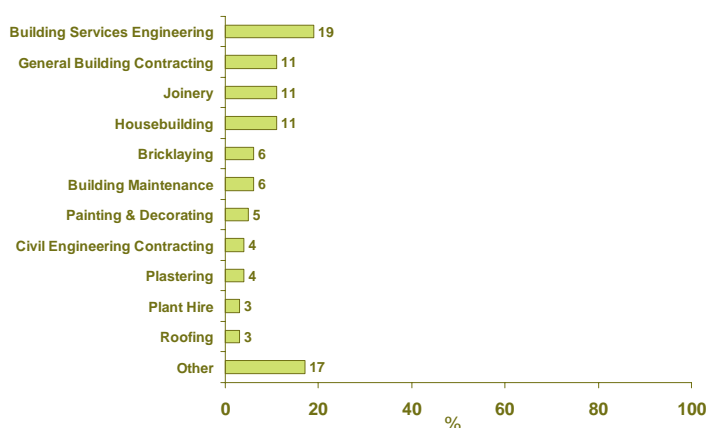
## Company profile

3.2 A broad spectrum of construction-related business activities were represented in the survey. One-fifth of all firms surveyed were from the building services engineering sector with approximately 10% representing general building contracting, joinery and house building.

**Figure 3.1:**

Base: 508

What is the primary activity of your company?



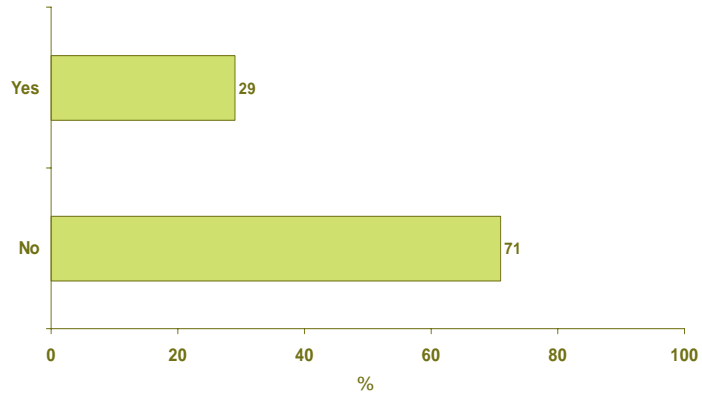
PricewaterhouseCoopers LLP

3.3 All respondents were asked if they currently have any apprentices or trainees on formal training programmes which lead to recognised qualifications. For the purposes of this research, apprentices were not considered as direct employees, therefore, all firms were asked this question regardless of employee size. Approximately 30% of respondents stated that they did have such individuals within their current workforce. These findings can be observed in Figure 3.2.

**Figure 3.2**

Base: All respondents (508)

Do you currently have any apprentices or trainees on formal training programmes which lead to recognised qualifications?



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- 3.4 The percentage of apprentices and/or trainees outlined in Figure 3.2 is slightly less than the figure quoted in the Employer Attitudes and Motivations to Learning and Training (NI) report<sup>+</sup> in March 2006 – which reported that 37% of firms employed apprentices and/or trainees. This could be explained in part by the small sample size of 63 construction firms used in the latter survey.
- 3.5 Figure 3.3 illustrates that approximately 21% of all respondents surveyed did not have any direct employees. Just over 40% stated that they have between one and four employees, with a further 27% reporting to have between five and nineteen. Just under 10% of firms stated that they currently employ 20 or more individuals within their company. These proportions are reflective of the employee profile of the Northern Ireland construction industry as a whole.
- 3.6 From the fundamental figures provided by respondents in terms of the total number of employees making up their current workforce, it was estimated that the average number of employees for all firms included in the survey was eight. Whilst the majority of firms included in the survey had less than five employees, it is worth noting that a number of firms had over 20 employees, therefore, inflating the average figure.

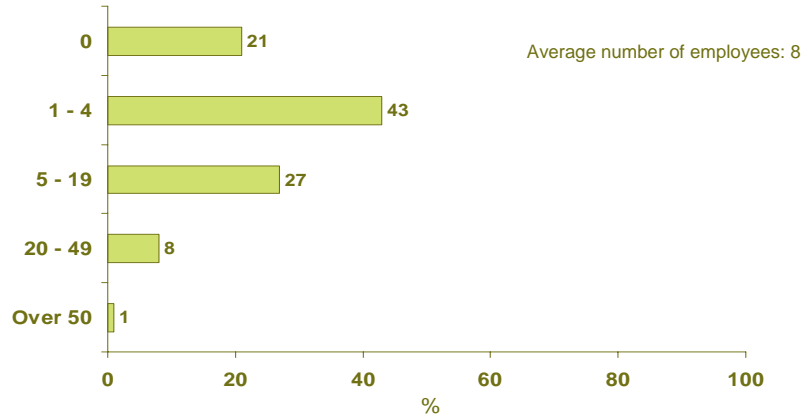
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<sup>+</sup> Employer Attitudes and Motivations to Learning and Training (Northern Ireland), IFF Research Ltd prepared on behalf of CITB–ConstructionSkills. Published March 2006

**Figure 3.3**

Base: 508

Including any apprentices or new recruits to your company, how many direct employees does your company employ in Northern Ireland?



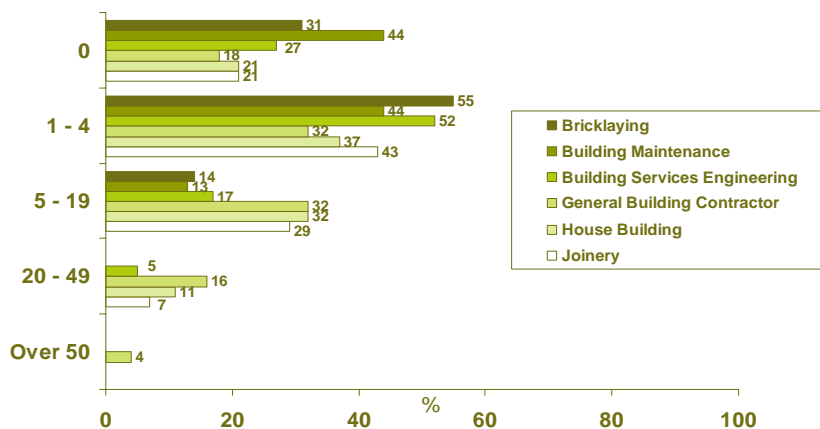
PricewaterhouseCoopers LLP

3.7 The general building, house building and joinery sectors appear to have the greatest number of direct employees. These findings are highlighted in Figure 3.4.

**Figure 3.4**

Base: Bricklaying (29), Building Maintenance (32), Building Services Engineering (97), General Building Contractor (57), House Building (57), Joinery (58)

Including any apprentices or new recruits to your company, how many direct employees does your company employ in Northern Ireland? – By main business activity



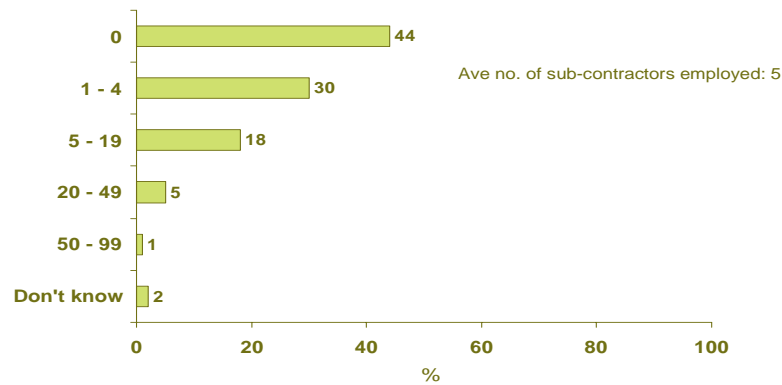
PricewaterhouseCoopers LLP

3.8 Respondents were subsequently asked 'how many people are currently working for you or your company on a labour only sub-contract basis'? It is worth noting that sub-contractors were not considered as direct employees, therefore, all firms were asked to comment on this question, regardless of employee size. Just over half of all firms reported that they had sub-contractors working for them. The average number of sub-contractors employed by all firms included within the survey was five.

**Figure 3.5**

Base: 508

How many people are currently working for you on a labour only sub-contract basis?



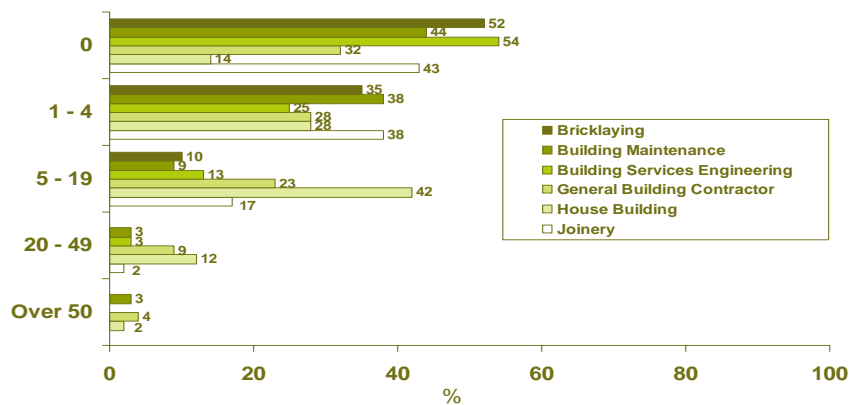
PricewaterhouseCoopers LLP

3.9 Whilst all sectors currently employ individuals on a sub-contract or labour only basis, Figure 3.6 highlights general building contracting and house building as the two main activities employing the greatest number of sub-contracted workers.

**Figure 3.6**

Base: Bricklaying (29), Building Maintenance (32), Building Services Engineering (97), General Building Contractor (57), House Building (57), Joinery (58)

How many people are currently working for you on a labour only sub-contract basis?– By main business activity



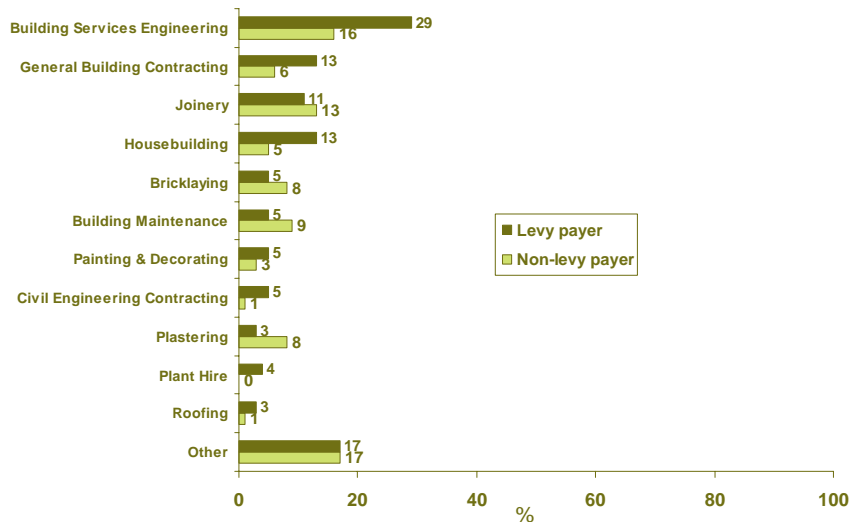
PricewaterhouseCoopers LLP

3.10 The greatest proportion of the levy-paying firms that participated in the survey stated that their primary activity was building services engineering, general building or house building. Conversely, non-levy paying respondents cited, building services engineering, joinery and building maintenance as their main business activity. Figure 3.7 illustrates these findings.

**Figure 3.7**

Base: Levy payer (388), Non-levy payer (120)

What is the primary activity of your company? – By levy type



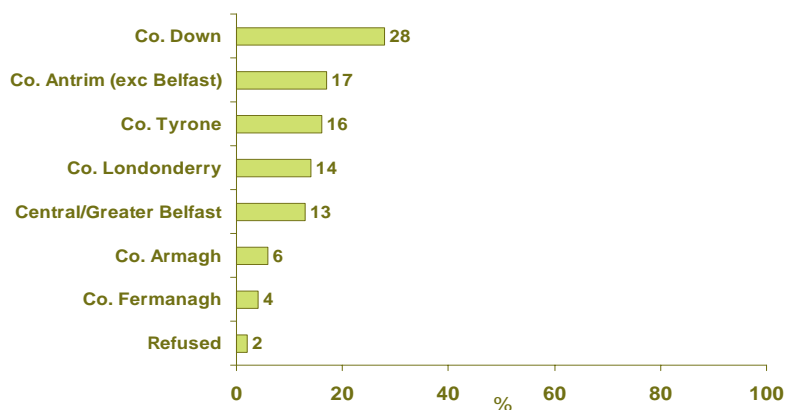
PricewaterhouseCoopers LLP

3.11 As outlined in Figure 3.8, the survey captured the views and opinions of construction firms throughout the province.

**Figure 3.8**

Base: 508

Where is your company headquarters located?



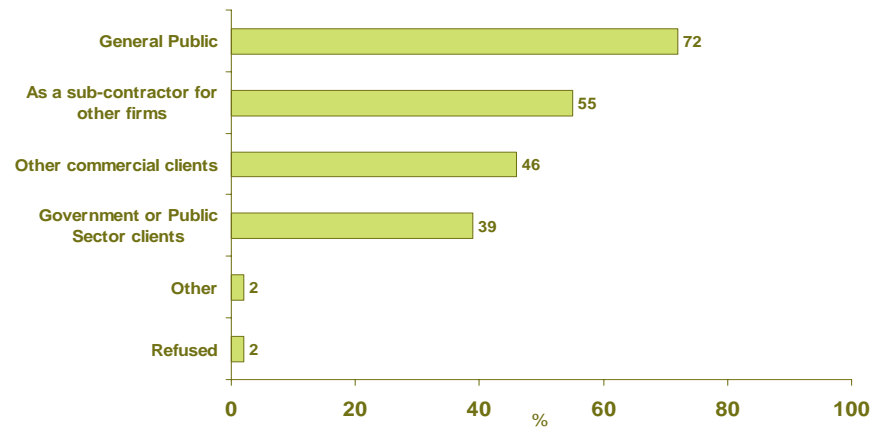
PricewaterhouseCoopers LLP

3.12 When questioned, the majority of respondents (72%) reported that they presently undertake work for the general public. Approximately half of all firms cited that they perform work for other commercial clients or act as a sub-contractor for other firms. Just under 40% of respondents cited the Government or Public Sector as clients.

**Figure 3.9**

Base: 508

Does your company undertake work for any of the following?



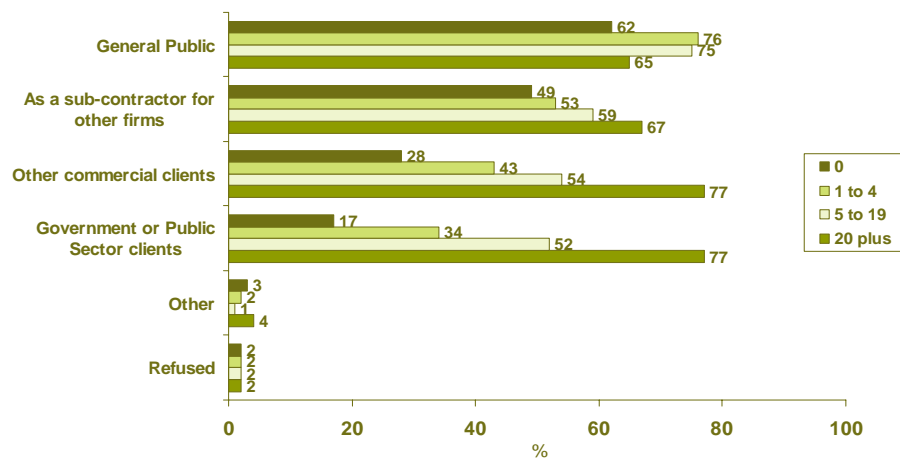
PricewaterhouseCoopers LLP

3.13 The majority of firms included in the survey undertake work for a variety of clients at the present time, however, Government or public sector work tends to be undertaken primarily by the larger employers. These findings are illustrated Figure 3.10.

**Figure 3.10**

Base: 0 employees (105), 1 - 4 (218), 5 - 19 (136), 20+(48)

Does your company undertake work for any of the following? –  
By employee size



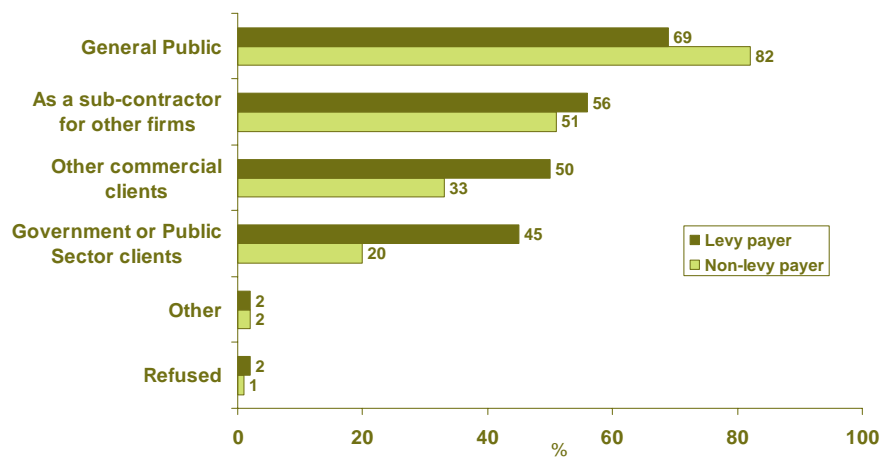
PricewaterhouseCoopers LLP

3.14 Analogous with the employee size breakdown, whilst both levy and non-levy paying respondents have a variety of clients in their portfolio, a greater proportion of levy-paying firms undertake work in the Government and public sector arena compared to non-levy payers. Conversely, a greater proportion of non-levy payers undertake work for the general public compared to their levy-paying counterparts. These findings are reported in Figure 3.11.

**Figure 3.11**

Base: Levy payer (388), Non-levy payer (120)

Does your company undertake work for any of the following? –  
By levy type



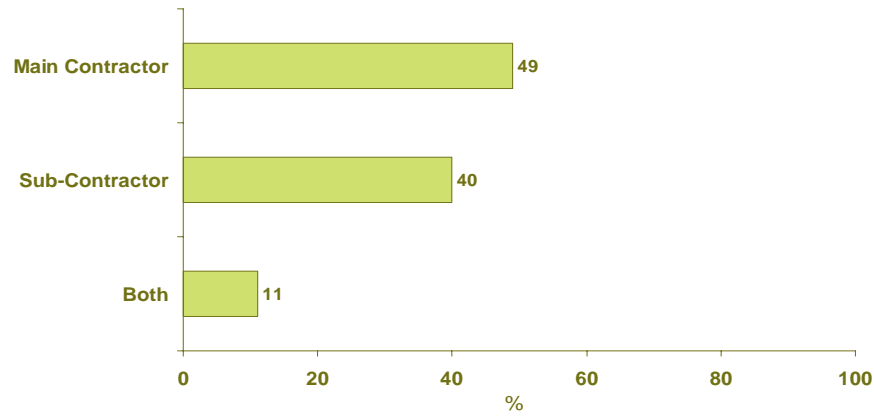
PricewaterhouseCoopers LLP

3.15 In order to ensure that the survey incorporated the views of both main contractors and sub-contractors, respondents were asked if they usually act as a main contractor or sub-contractor on projects, as highlighted in Figure 3.12. Approximately half of all respondents surveyed cited that they were main contractors, whilst 40% reported that they normally act as a sub-contractor. It was reported that around one in ten firms will act as both, depending on the nature of the job.

**Figure 3.12**

Base: 508

Does your company usually act as a main contractor or sub-contractor on construction projects?



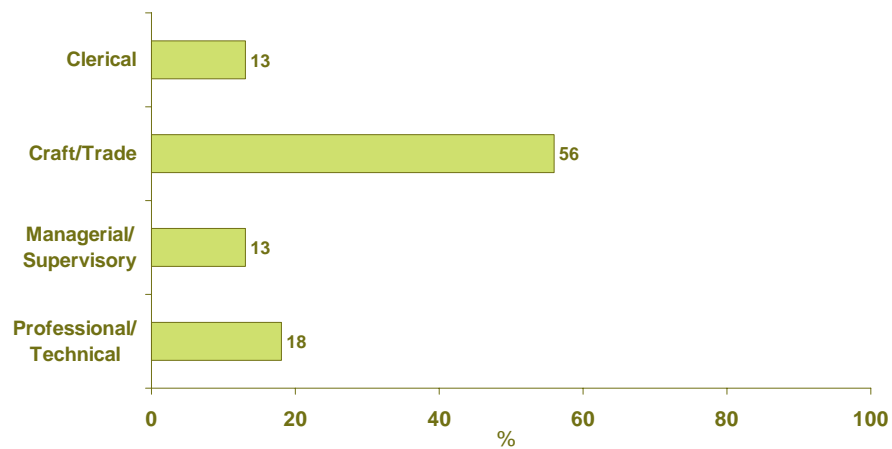
PricewaterhouseCoopers LLP

3.16 Respondents were then asked to provide a breakdown of their total employees in terms of the occupations illustrated in Figure 3.13. The individual figures provided by the respondents for each of the occupations were used as a means of calculating the percentage breakdown of their total workforce. Based on the information provided, it was calculated that over 50% of all employees were employed within the craft/trade occupations. Just over 10% were employed within a managerial/supervisory function, with 18% employed within a professional/technical capacity.

**Figure 3.13**

Base: Percentage calculated based on the total number of employees (4155), as provided by respondents

Proportion of staff employed in each of the following areas



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3.17 The figures highlighted in Figure 3.13 differ from those quoted in the Construction Skills Network Labour Market Intelligence report<sup>+</sup> which estimated the breakdown as follows:

- Clerical (7%);
- Craft/Trade (71%);
- Managerial/Supervisory (13%); and
- Professional/Technical (10%).

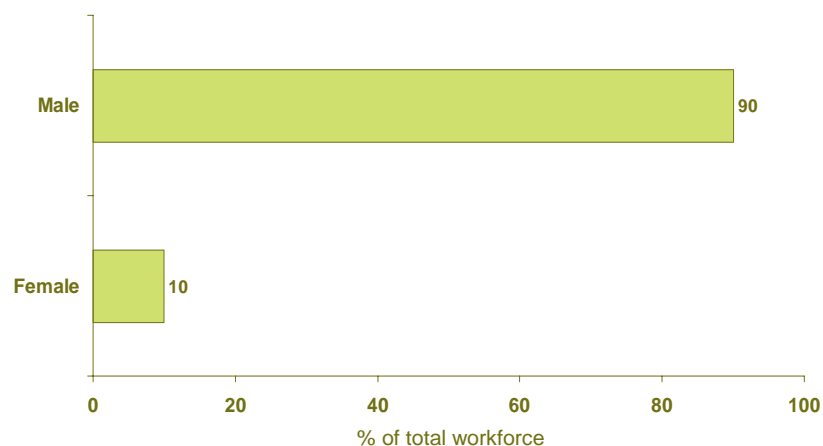
3.18 This may be explainable in part by the comprehensive trade occupations included within the Construction Skills Network Model used to produce the statistics above. The current study does not include all of the occupations listed in the Construction Skills Network report, consequently, the occupational breakdown of the total sample may differ.

3.19 Respondents were also asked to provide the total number of females working within the occupations they had previously mentioned. It was calculated from the raw figures provided by the respondents surveyed that 10% of the 4,155 employees employed within the firms surveyed were female. This can be viewed in Figure 3.14.

**Figure 3.14**

Base: Total employees (4155)

### Gender profile of employees



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3.20 The proportion of females within the construction industry quoted in Figure 3.14 is similar to that reported in the Sector Skills Agreement Draft - Stages 1-3 for the Construction Industry in Northern Ireland (V2) Report<sup>+</sup> in November 2005 which put the figure at 10.5%.

3.21 The majority of workshop attendees were of the opinion that females represented a small proportion of the construction industry workforce. A number of participants indicated that is often difficult to encourage females to enter into the construction industry due to the nature of

<sup>+</sup> Northern Ireland Labour Market Intelligence 2006, Construction Skills Network. Published May 2006.

<sup>+</sup> Sector Skills Agreement Draft. Stages 1-3 for the Construction Industry in Northern Ireland (Version 2), ConstructionSkills. Published November 2005. Whilst the figure was quoted in the aforementioned report, the original source was taken from the Northern Ireland Census of Employment 2001 and work originally undertaken by CITB (NI).

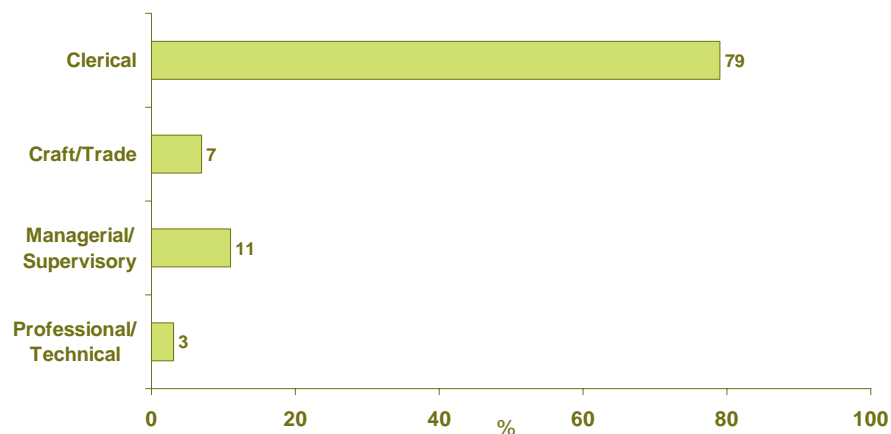
the work. A number of respondents commented on the need for schools to promote the construction sector as a viable career for everyone instead of consistent endorsement of the traditional teaching, science and health professions.

- 3.22 It was also discussed during the qualitative sessions that there is often reluctance on the part of employers to employ female staff. The group participants were of the opinion that many male employers are concerned about employing females due to the lack of toilet facilities on site, the potential expense of maternity leave, and the possibility of mixed relations in the workplace which may cause unnecessary hassle for other employees and the employer.
- 3.23 It was the general consensus of the qualitative workshop participants that the issues identified above must be tackled if the diversity of the industry is to improve.
- 3.24 As highlighted in Figure 3.15, 79% of the 417 females working within the construction industry were clerical staff, with only 7% employed within a craft/trade capacity. Just over 10% of all females within the industry had managerial/supervisory roles, with even fewer (3%) operating in a professional/technical capacity.

**Figure 3.15**

Base: Total number of females within the workforce (417)

Occupational breakdown of females working within the construction industry..



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- 3.25 The qualitative workshops also estimated the percentage of females within the industry to be between 5-10%. It was the general opinion from the workshops that the promotion of the construction industry to women can only occur if the negative perceptions of the industry are dispelled and the on-site conditions addressed in order to accommodate women.

### Skills shortages, gaps and hard to fill vacancies

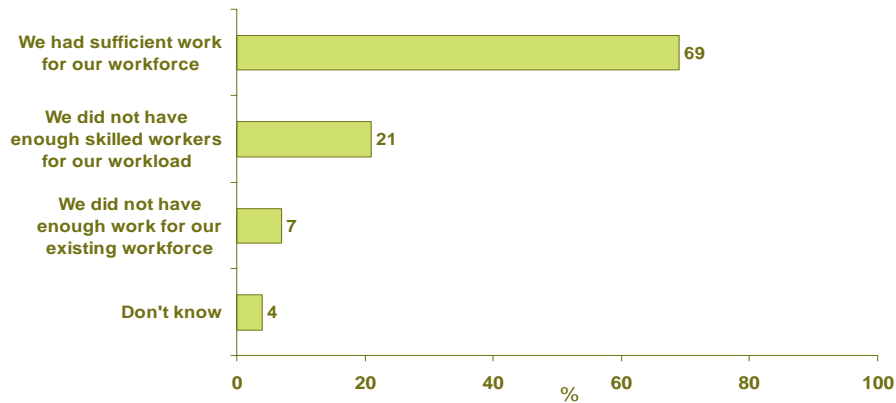
- 3.26 The next section of the questionnaire, and hence this report, investigated the issues of skills shortages and skills gaps. A definition of both skills shortages and skills gaps was communicated to respondents in order to provide distinction between the two concepts.
- 3.27 All respondents, including those with no direct employees, were asked to consider a number of statements that related to the workload of the company and the availability of staff to carry

out such work. The vast majority (69%) were of the opinion that general workloads were sufficient for the existing workforce. Just over 20% of employers believed that they did not have enough skilled workers to accommodate the current workload; whilst a small proportion (7%) held an opposing view in that they did not have enough work for their existing workforce. Figure 3.16 presents these findings.

**Figure 3.16**

Base: 508

In general, which of the following statements best describes your company's workload over the past 12 months?



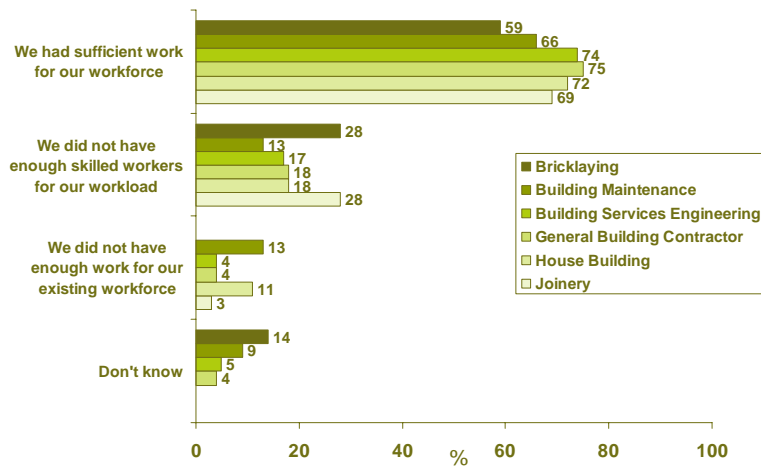
PricewaterhouseCoopers LLP

3.28 Figure 3.17 indicates that a shortage of skilled workers to accommodate the existing workload was a particular issue amongst the bricklaying and joinery sectors.

**Figure 3.17**

Base: Bricklaying (29), Building Maintenance (32), Building Services Engineering (97), General Building Contractor (57), House Building (57), Joinery (58)

In general, which of the following statements best describes your company's workload over the past 12 months? – By main business activity



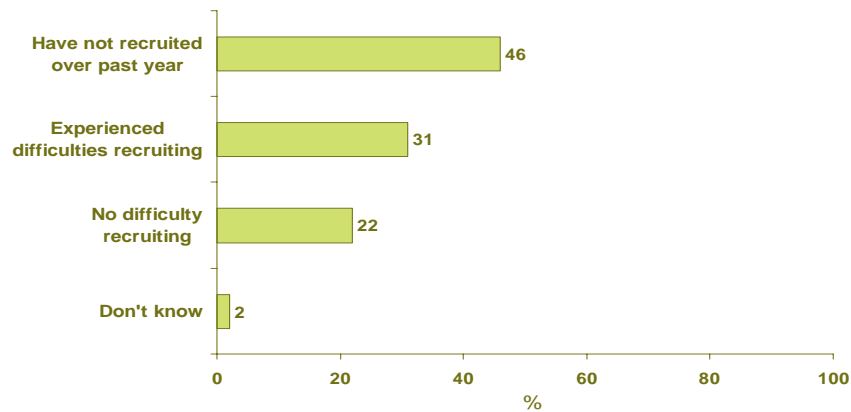
PricewaterhouseCoopers LLP

3.29 In addition, all 508 respondents were asked to consider their recruitment experience over the past year. Just under half of all firms (46%) reported that they had not recruited over the past year. It is worth noting, however, that a significant proportion of this group do not have any direct employees, and are therefore unlikely to undertake a recruitment campaign. Whilst approximately 20% of firms did undertake a recruitment campaign and experienced no difficulty in doing so, approximately 30% reported that they did experience difficulty during their recruitment programme.

**Figure 3.18**

Base: 508

Which of the following statements best describes your recruitment experience over the past year?



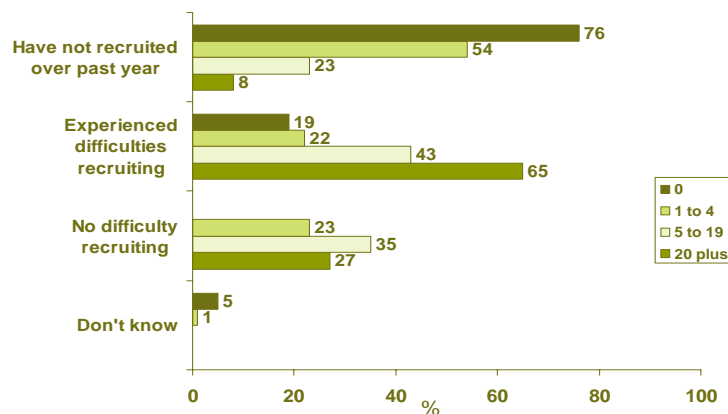
PricewaterhouseCoopers LLP

3.30 Figure 3.19 suggests that larger employers experienced greater difficulty with the recruitment of new staff over the past year when compared to those with less than five employees.

**Figure 3.19**

Base: 0 employees (105), 1 - 4 (218), 5 - 19 (136), 20+ (48)

Which of the following statements best describes your recruitment experience over the past year? – By employee size



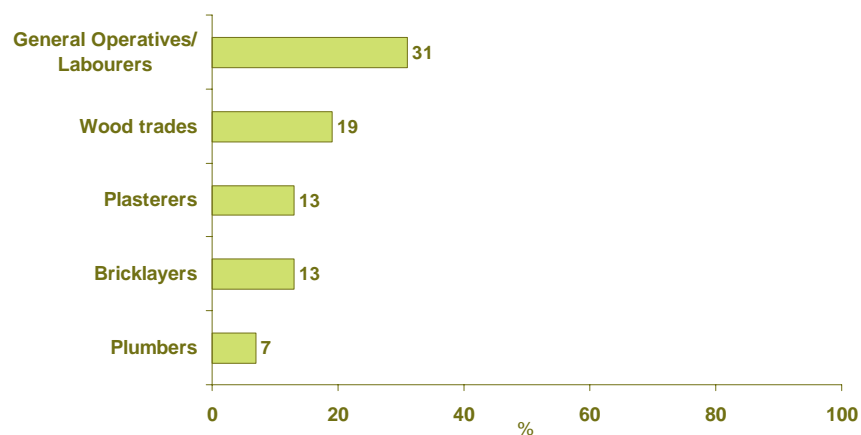
PricewaterhouseCoopers LLP

- 3.31 The firms who had commented that they had experienced difficulty when trying to recruit new staff to their company over the past year were subsequently asked what occupations they had difficulty recruiting new staff into. Figure 3.20 highlights the top five occupations as reported by respondents.
- 3.32 Almost one-third of the 156 firms who had experienced difficulty with the recruitment of new staff were of the opinion that general operatives/labourers were difficult to recruit. Just less than 20% cited that recruiting staff into the wood trades was difficult, with approximately 10% stating plasterers, bricklayers and plumbers as difficult to source occupations.

**Figure 3.20**

Base: Those who experienced difficulty recruiting (156)

What occupations have you had difficulty recruiting new staff into? – Top 5 responses



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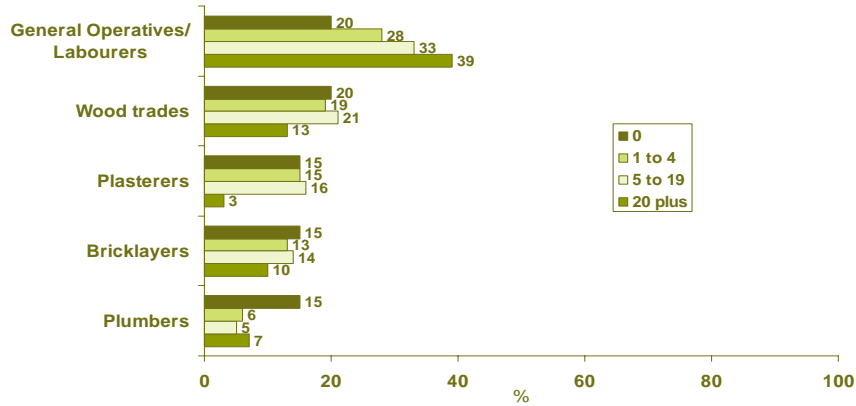
- 3.33 Whilst the current study indicated that difficulty existed with the recruitment of general operatives/labourers, and to a lesser extent, the wood trades – the Employers and Skills Needs Survey<sup>+</sup> undertaken in Great Britain in 2004 highlighted particular difficulty with recruitment within the wood trades (29%) and bricklaying (22%). Only 14% of employers with recruitment difficulties reported that they had particular concern recruiting general operatives/labourers.
- 3.34 As indicated in Figure 3.21, the recruitment of general operatives/labourers was a particular concern for the larger employers compared to their smaller counterparts.

<sup>+</sup> Employers' Skills Needs Survey, CITB–ConstructionSkills. Published Autumn 2004.

**Figure 3.21**

Base: Those who experienced difficulty recruiting; 0 employees (20), 1 - 4 (47), 5 - 19 (58), 20+ (31)

What occupations have you had difficulty recruiting new staff into? – Top 5 responses by employee size



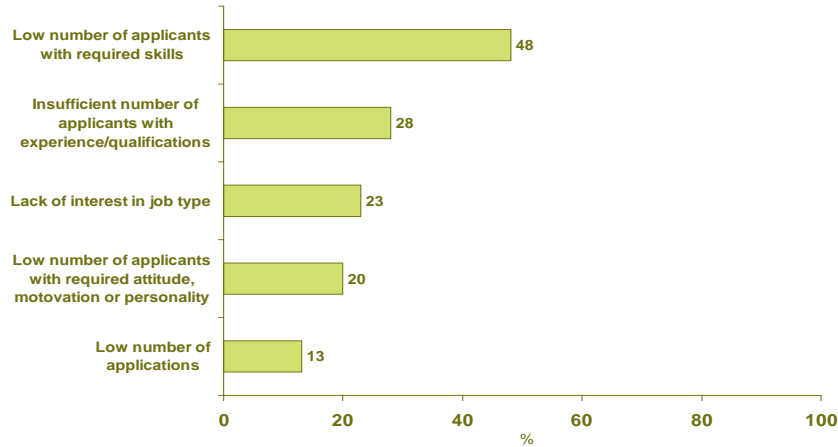
PricewaterhouseCoopers LLP

- 3.35 Following on from the identification of the occupations that were difficult to recruit, respondents were asked to provide, in their view, the main reasons for the difficulties experienced during the recruitment process. As highlighted in Figure 3.22, nearly half of all respondents who had experienced recruitment problems stated the lack of applicants with the required skills as the main reason for the problems they experienced.
- 3.36 Just under 30% of the 156 firms who had experienced recent difficulties reported that there was an insufficient number of applicants with the required experience and/or qualifications. A general lack of interest in the job type and a lack of the required attitude and/or motivation were cited by approximately 20% of respondents as the key reason for the recruitment difficulties they had experienced. This was of particular concern for larger employers compared to smaller firms (i.e. those with less than five employees).

**Figure 3.22**

Base: Those who experienced difficulty recruiting (156)

What were the main reasons for the difficulties you experienced in filling your vacancies? – Top 5 responses



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- 3.37 The qualitative workshops presented an additional issue that contributes to the skill shortages of a company – that of ‘head hunting’. It was highlighted that firms are often frustrated when they train individuals to a certain standard and they are then poached by another company. In order to reduce the occurrence of this scenario, it was suggested that there should be a requirement on the part of all firms to train individuals to a minimum level.
- 3.38 The lack of applicants with the required skill set was cited as the main reason for the recruitment difficulties experienced by the 156 firms; followed by an insufficient number of applicants with the relevant experience/qualification. The Sector Skills Agreement Draft - Stages 1-3 for the Construction Industry Northern Ireland (V2) report<sup>+</sup> published in 2005 stated that over half of employers reported ‘lack of interest in this job type’ as the main contributing factor to the recruitment problems experienced; followed by ‘low number of applicants with the required skills’ (20%).
- 3.39 This would suggest that there is a greater level of interest for work within the Northern Ireland construction industry in 2006; however, the skill level of the potential employees does not appear to match the interest level.
- 3.40 In addition to investigating the skills shortages within the industry, an important element of the study was to ascertain the skills gaps that exist within the industry. All respondents that had experienced recruitment difficulties (156) were initially asked to think about the applicants that had recently applied for positions within their company and then questioned on what skills the applicants did **not** possess, regardless of whether they were successful or not. As illustrated in Figure 3.23, the overwhelming majority of respondents who experienced recruitment difficulties reported technical and/or practical or job-specific skills as the main competency that applicants lacked. Only 5% stated literacy or numeracy as a problem area.

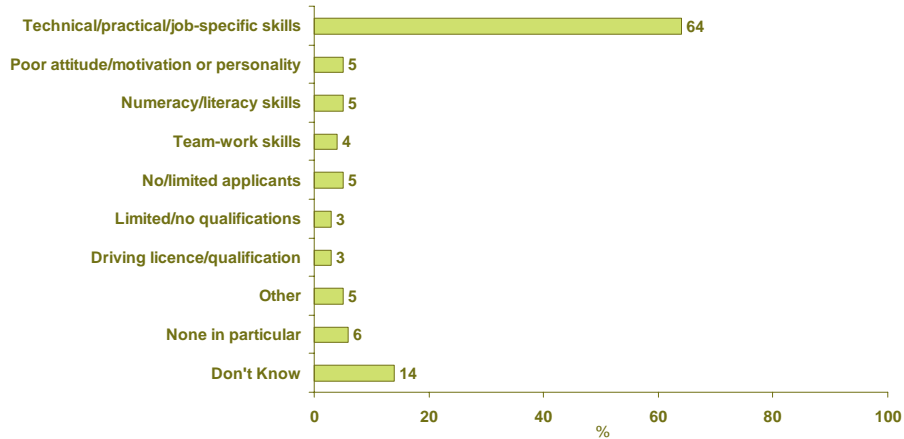
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<sup>+</sup> Whilst figures were quoted in the Sector Skills Agreement report, the original source was The Northern Ireland Skills Monitoring Survey 2002, Skills Unit, Research & Evaluation Branch, Department for Employment & Learning (Based on results of a Survey carried out by the Central Survey Unit, NISRA, during May and June 2002). Published June 2003

**Figure 3.23**

Base: Those who experienced difficulty recruiting (156)

For those that applied for the vacancies what skills did the applicants not possess?



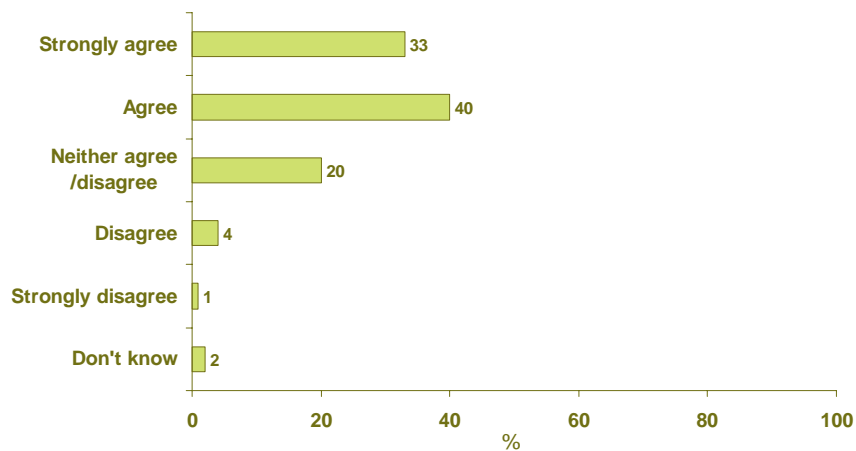
PricewaterhouseCoopers LLP

3.41 Moving on from new recruits or potential new recruits, respondents with one or more employees (402 firms) were asked to what extent they agreed or disagreed that their current staff possess all the skills required to enable them to do their job to their maximum potential. Almost three-quarters of the 402 employers were of the general opinion that their staff possess the necessary skills to do their job; only 5% of employers cited the contrary. This figure increases to 6% when the views of the sole traders are added to the calculation.

**Figure 3.24**

Base: Those with 1 or more employee (402)

Do you agree or disagree that your staff possess all the skills required to enable them to do their jobs to their maximum potential?



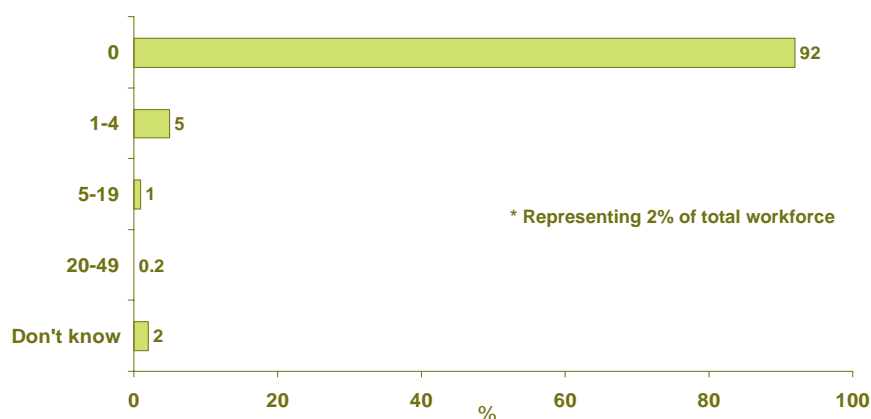
PricewaterhouseCoopers LLP

- 3.42 Although the question was asked slightly differently, The Sector Skills Agreement Draft - Stages 1-3 for the Construction Industry Northern Ireland (V2) report<sup>+</sup> outlined that 12% of employers stated their staff lacked the skills required to deliver the business objectives of the company.
- 3.43 The skills gaps question was analysed by employee size and the findings indicated that larger employers were more likely to state 'agree' rather than 'strongly agree' in comparison to the smaller firms (i.e. less than five employees). In addition, levy-paying firms were also more likely to 'agree' than 'strongly agree' when compared to non-levy payers, thus indicating that some improvement can be made.
- 3.44 Subsequently, all respondents were asked to provide the number of employees within their company that they would consider to be lacking the skills required that would enable them to do their jobs to the best of their ability. For those with no direct employees, the respondent was asked if they themselves lacked the skills required to do their job to the best of their ability. The total number provided by respondents was calculated and expressed as a percentage of the total workforce for all firms included in the survey. It was calculated that 2% of the total workforce of all firms surveyed lacked the skills necessary for the job they were recruited to do.

**Figure 3.25**

Base: 508

How many of your employees are currently lacking skills that would enable them to do their jobs to the maximum of their potential?



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- 3.45 It is worth noting that all those that did not agree that their staff lacked the required skills were given a value of zero in the calculation outlined in Figure 3.25.
- 3.46 Of those respondents that had staff that lacked skills of some sort (33) the majority cited general operatives/labourers as the occupation where skills gaps are present. A significant proportion (between 12-15%) also reported engineers, painters and decorators, plumbers and

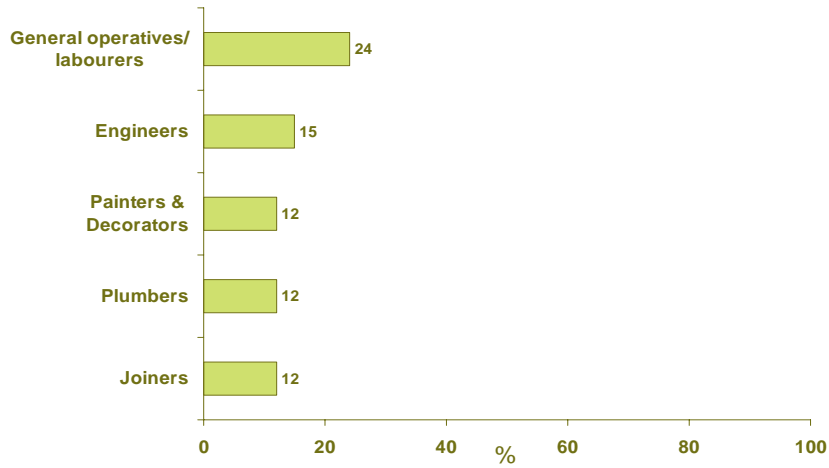
<sup>+</sup> Whilst figures were quoted in the Sector Skills Agreement report, the original source was The Northern Ireland Skills Monitoring Survey 2002, Skills Unit, Research & Evaluation Branch, Department for Employment & Learning (Based on results of a Survey carried out by the Central Survey Unit, NISRA, during May and June 2002). Published June 2003.

joiners as having gaps in their skill set. These results can be observed in Figure 3.26.

**Figure 3.26**

Base: Those that stated skills gaps exist within company (33)

Can you please tell me the occupations where these skills gaps exist? – Top 5 responses



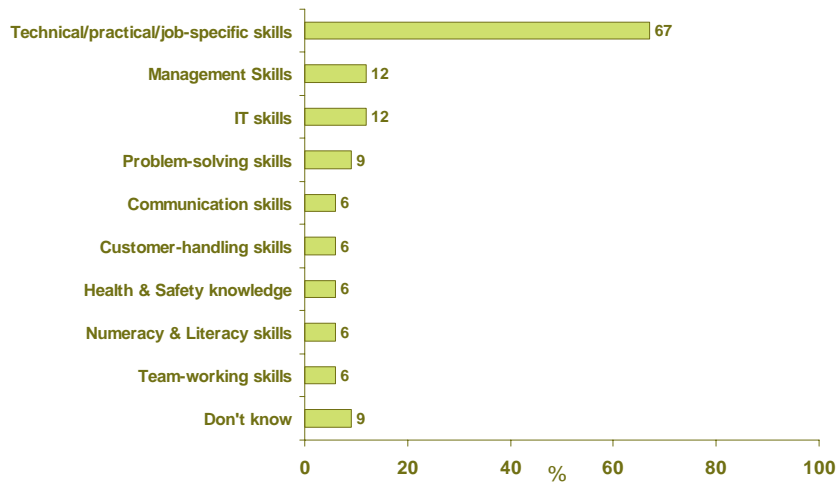
PricewaterhouseCoopers LLP

3.47 The same respondents, i.e. those that had stated skills gaps exist within the current workforce (33), were asked to outline which skills required improvement. Figure 3.27 highlights that the overwhelming majority of respondents (67%) stated that technical/practical or job/specific skills required improvement.

**Figure 3.27**

Base: Those that stated skills gaps exist within company (33)

What skills require improvement?



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3.48 The 33 respondents that stated skills gaps were present were then asked to provide their opinion on the main cause(s) of the skills gaps that have been identified. These findings are illustrated in Figure 3.28

**Figure 3.28**

Base: Those that stated skills gaps exist within company (33)

What are the main causes of skills gaps in your company?



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3.49 As highlighted above, the majority of respondents that reported skills gaps within their existing workforce stated that the main cause of the skills gaps was as a result of the lack of opportunity to train or develop (33%). The second most cited reason was the 'lack of staff experience' (27%).

3.50 In general, the findings obtained from the qualitative workshops and depth-interviews complimented the key findings of the quantitative survey with respect to the skills gaps and shortages within the industry. The two key themes arising from the qualitative discussions were a general lack of applicants applying to the industry and the shortage of skills required by the industry at present, particularly amongst new entrants such as apprentices and/or trainees.

3.51 A significant number of representatives of the industry, including employers, were of the opinion that the negative perception of the industry discourages people from seeking a career in construction. Participants in the qualitative stages of this research reported that the construction industry is often viewed as an industry for those with no career aspirations, or for individuals with little or no opportunity in other sectors. In addition, it was noted that the working conditions on site are a major deterrent for many people. Participants stated that these issues need to be addressed if more people are to be encouraged into the industry.

3.52 Throughout the qualitative discussions it was highlighted that the low salary apprentices receive, when compared with other options available to school leavers, is contributing to the lack of interest in the industry. Moreover, it was noted by a few respondents that the benefit system in Northern Ireland should be changed in order to make it more appealing for school leavers to seek employment. Group participants outlined that the construction industry must raise its profile amongst young people, and their parents, in order to inform people of the

career opportunities available within the sector; otherwise the industry will not be able to attract the high-calibre applicants it requires.

- 3.53 In one workshop discussion, it was the common belief of a number of participants that the skills gaps which exist within the industry are due to the lack of practical experience provided at a trainee level. The lack of ongoing training and formal skills development, particularly once NVQ level two is attained, was cited as a key factor contributing to the skill gaps within the industry. In order to bridge this gap, many participants held the view that better communication is required between employers and the suppliers of education and skills training. It was thought that the improvement in communication will ultimately help to provide training which matches the demands of the industry.
- 3.54 One discrepancy did arise between the qualitative and quantitative phases of the assignment and this was in relation to the percentage of the current workforce that is unable to do their job to the best of their ability. It was noted at the post-survey workshop that participants generally perceived the skills gaps amongst their own employees to be greater than the 2% of the total workforce as estimated by the firms surveyed in the quantitative phase. Participants reported that that they could highlight a number of areas for development for all of their employees.

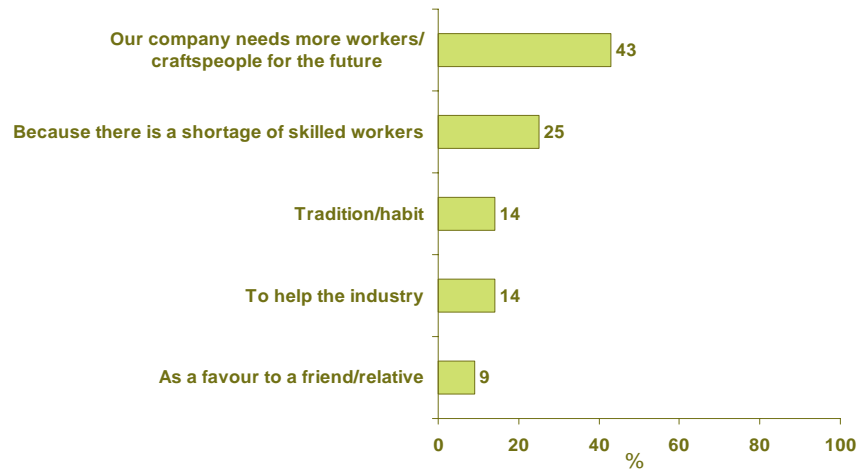
### **Apprentices and trainees**

- 3.55 The following section of the questionnaire, and hence this report, investigated the subject of apprenticeships and/or trainees on formal training courses which lead to recognised qualifications. All respondents who previously stated that they currently have apprentices and/or trainees on formal training courses were asked to provide their main reason for hiring such individuals.
- 3.56 As demonstrated in Figure 3.29, of the 146 firms that currently have apprentices and/or trainees, 43% have taken on such individuals in order to provide more workers/craftspeople for the future. One-quarter of the same group of respondents reported that the shortage of skilled workers has resulted in the need to take on apprentices/trainees. 'Tradition or habit', 'to help the industry' and 'as a favour to friend/relative' were also cited by a significant proportion as the main reason for taking on apprentices/trainees.

**Figure 3.29**

Base: Those with apprentices as an employee (146)

Can you please tell me what were the main reasons for taking on apprentices and/or trainees? - Top 5 responses



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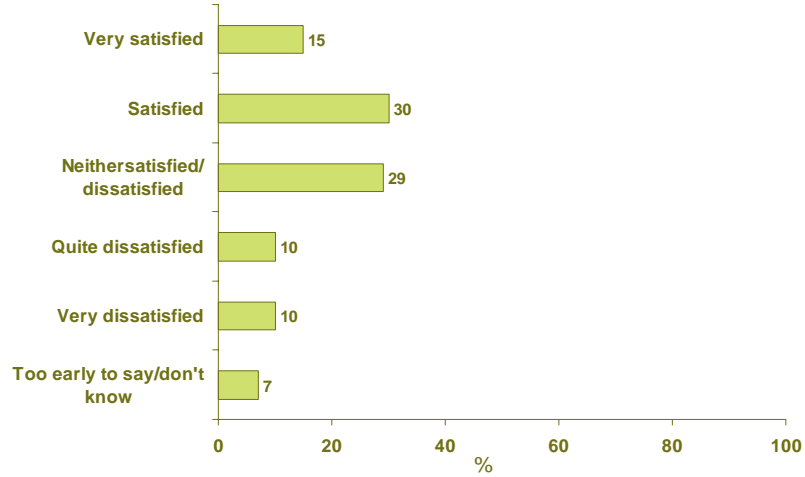
- 3.57 The two principal reasons for taking on apprentices and/or trainees, as highlighted in Figure 3.29, are comparable with the top two reasons reported in the Employer Attitudes and Motivations to Learning and Training (UK) report<sup>+</sup> in 2005. A smaller proportion of respondents within the aforementioned study (4%) reported that they hired apprentices out of tradition or habit compared to 14% of respondents within the current study.
- 3.58 Respondents who have taken on apprentices and/or trainees who were receiving training from a college or training provider (136) were asked to rate their level of satisfaction with the training provided by the college or training provider. Under half (45%) of those respondents who have apprentices and/or trainees at college or with a training provider stated that they were satisfied with the training provided, with a further 29% reporting that they were neither satisfied nor dissatisfied. Two out of ten respondents cited that they were dissatisfied with the training provided by the college or training provider. These findings are illustrated in Figure 3.30.

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<sup>+</sup> Employer Attitudes and Motivations to Learning and Training, IFF Research Ltd – prepared on behalf of ConstructionSkills. Published April 2005.

Base: Those with apprentices spending time at college/training (136)

How satisfied or dissatisfied are you with the training they receive at college or with the training provider?



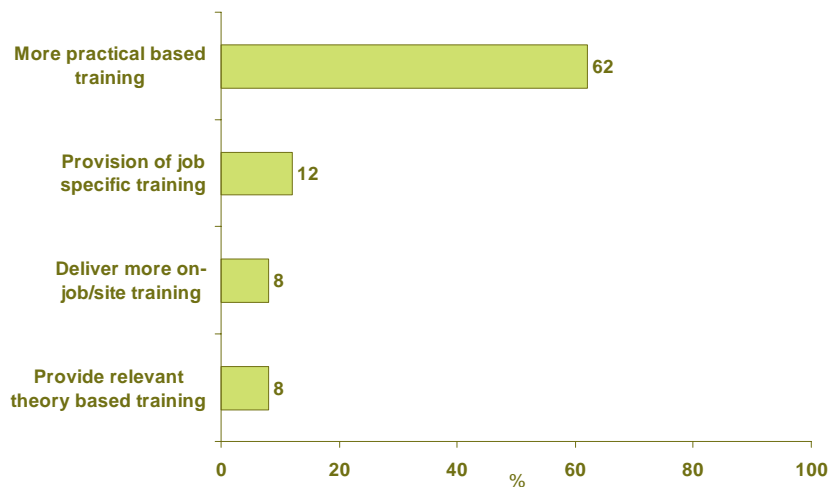
PricewaterhouseCoopers LLP

- 3.59 There were no significant differences observed when analysed by levy type or employee size.
- 3.60 Respondents that had demonstrated dissatisfaction with the training provided (26) were subsequently asked how the training should be improved. The overwhelming majority (62%) stated that more practical based training was required. The findings illustrated in Figure 3.31 should be treated indicatively due to the small base size.

**Figure 3.31**

Base: Those that were dissatisfied with training provided (26\*)

How would you like to see the training delivered by the college or training provider improved? – Top 3 responses



\* Caution small base

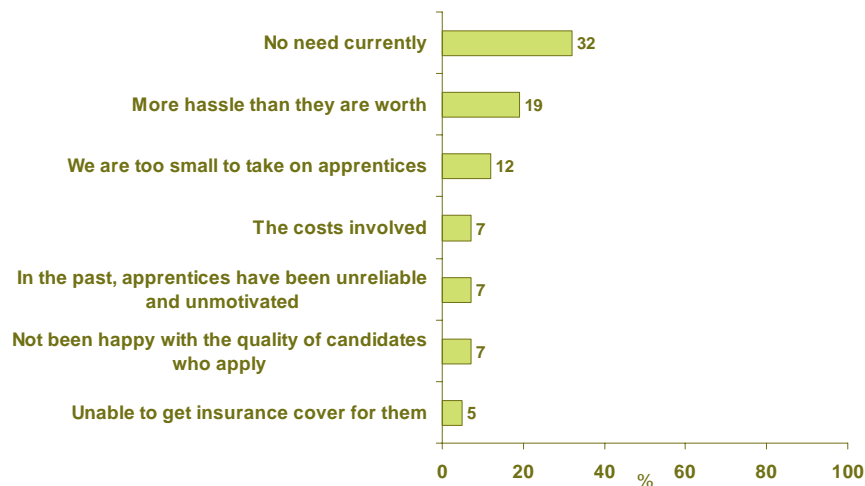
PricewaterhouseCoopers LLP

3.61 Of those respondents that do not currently have apprentices/trainees on formal training programmes (362), approximately one-third were of the belief that there is no need to do so at present. Almost 20% reported that apprentices and/or trainees are more hassle than they are worth, with a further 12% stating that the company is too small to take on apprentices. The full detail can be observed in Figure 3.32.

**Figure 3.32**

Base: Those that do not have apprentices (362)

Can you please tell me the main reasons for not taking on apprentices? – Top 5 responses



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3.62 The main reason for not taking on apprentices as stated by the 362 firms that do not currently have apprentices and/or trainees, namely the absence of necessity at the present time, concurs with the primary reason cited by employers in the Employer Attitudes and Motivations to Learning and Training (UK) report<sup>+</sup> in 2005. The latter report however, presented ‘we are too small to take on apprentices (19%), and ‘past apprentices have been unreliable and unmotivated’ (13%) as the secondary and tertiary reasons for not taking on apprentices. This would suggest that Northern Ireland firms have a more negative impression of the current apprenticeship process than employers in the UK.

3.63 All respondents that do not currently have apprentices (362) were subsequently asked what would encourage them to take on apprentices or trainees in the future. Approximately one-quarter of the 362 firms reported that a greater financial incentive would be the main motivation to take on apprentices. 17% reported that apprentices would be recruited if the workload of the company was to increase.

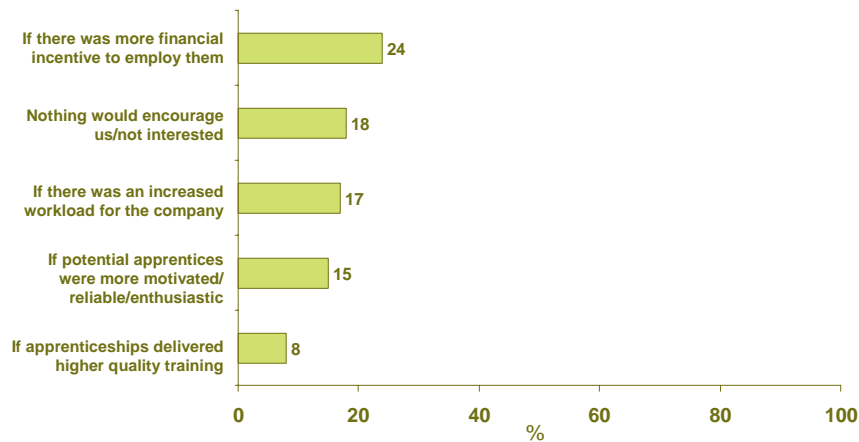
3.64 Improvements in motivation levels and reliability of the potential candidates would provide encouragement for 15% of the same group of respondents to take on apprentices or trainees. In addition, the delivery of high quality training courses would help to encourage a further 8% of respondents. Approximately one-fifth of those that do not currently have apprentices/trainees reported that nothing would encourage them to take on apprentices. Figure 3.33 outlines these findings.

<sup>+</sup> Employer Attitudes and Motivations to Learning and Training, IFF Research Ltd prepared on behalf of ConstructionSkills. Published April 2005.

**Figure 3.33**

Base: Those that do not have apprentices (362)

What would encourage you to take on apprentices or trainees in the future? - Top 5 responses



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- 3.65 The figures outlined in Figure 3.33 are consistent with those of the Employer Attitudes and Motivations to Learning and Training (UK) report<sup>†</sup> published in 2005. However, it was therein reported that approximately one-third of employers could not be encouraged to take on apprentices compared to only 18% of respondents within the present study.
- 3.66 The discussion on apprentices and apprenticeship schemes during the qualitative workshops did not cover all of the areas contained in the quantitative survey due to the time constraints of the workshops. The common thread between the quantitative and qualitative elements of the study was the identification of the inadequate levels of practical-based training provided to apprentices and/or trainees within the industry. Many workshop attendees were of the opinion that the quality of apprenticeship schemes has diminished in recent years. It was the general viewpoint that there should be more emphasis on practical skills rather than theory based learning, most of which should already have been completed during the school years. In addition, several participants commented that employers want individuals who can be productive as soon as they are taken on, therefore, it is essential that the training they receive provides them with the core skills required on site.
- 3.67 A significant number of the post-survey workshop attendees were surprised at the positive ratings colleges and/or training providers received from those respondents with apprentices spending time at college or receiving formal training. The group questioned whether survey respondents stated that they were satisfied because their apprentices/ trainees had passed the training rather than rating how the apprentices/trainees have applied their training at the construction site.
- 3.68 The workshop participants, however, were in agreement with the key barriers presented by firms for not taking on apprentices. It was the widely held view of the group that a significant number of Northern Ireland construction firms do not take on apprentices. It was also reported that many of the companies who do take on apprentices or trainees do not spend sufficient time nor money to provide them with good site training; instead many are used as a cheap

resource and are not offered a full-time position when training is completed. It was subsequently discussed that this is not how apprentices should be used as it is neither beneficial to the apprentice nor the industry as a whole.

- 3.69 One area that was discussed during the post-survey workshop which was not covered during the quantitative survey was the suggested requirement for firms, both within the private and public sector arena, to be involved in an apprenticeship scheme as a prerequisite to tendering for work. This was perceived by participants to be the fairest method to ensure that all companies contribute towards ensuring the longevity of a skilled workforce within the construction industry, and to ensure that firms that do provide training are not penalised by the associated costs of doing so when competing with others who do not have apprentices. It was also discussed that this approach would minimise the loss of employees or recently qualified trainees through ‘head-hunting’ which often occurs within the industry.

### Recruitment of new employees

- 3.70 In order to calculate the percentage of newly recruited staff over the past year, employers with one or more employee (402) were asked to provide the total number of employees recruited over the previous twelve months. Figure 3.34 highlights these findings.

**Figure 3.34**

Base: Those with 1 employee or more (402)

How many of your employees have been recruited in the last year?



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- 3.71 It was calculated that 20% of the existing workforce was recruited over the past year. It is worth noting, however, that three employers within the current study recruited over 40 employees in the last year which will have significant influence on the figure calculated in Figure 3.34. Moreover, the 20% figure calculated is not a net figure. It does not take account of staff leaving the company, therefore, it is not possible to say whether or not these are additional employees or simply the replenishment of staff as a result of previous employees leaving the organisation.

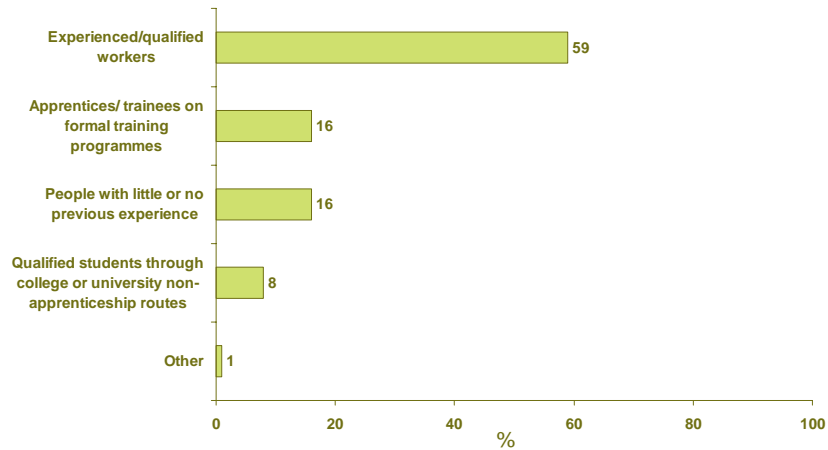
- 3.72 Figure 3.35 illustrates the percentage breakdown of new recruits in terms of their point of entry for those 215 firms that had recruited over the past year. The overwhelming majority of new recruits (59%) were experienced and/or qualified workers, hence illustrating the fluidity of the

industry. 16% of recruits were taken on via apprenticeships or training programmes, with an additional 16% entering the industry without any previous experience. Only 8% of new employees were recruited through college or university non-apprenticeship routes.

**Figure 3.35**

Base: Those who have recruited in the last year (215)

Percentage of new employees recruited or taken on from each of the following areas



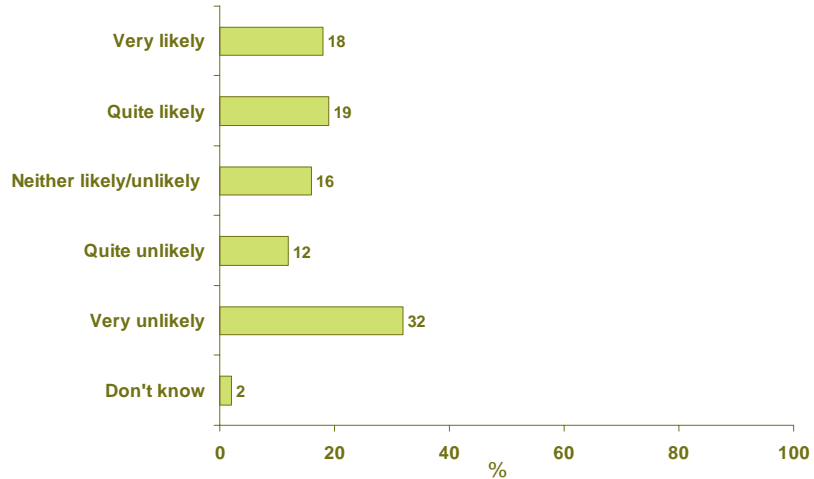
PricewaterhouseCoopers LLP

3.73 All respondents (508), regardless of whether or not they currently have apprentices and/or trainees, were asked how likely they would be to take on apprentices and/or trainees over the next three years. In Figure 3.36, 37% of all respondents reported that they are either very likely or quite likely to do so. Conversely, almost 45% of respondents stated that they are unlikely to take on apprentices in the next 3 years.

**Figure 3.36**

Base: 508

How likely are you to take on apprentices and/or trainees on formal training programmes over the next 3 years?



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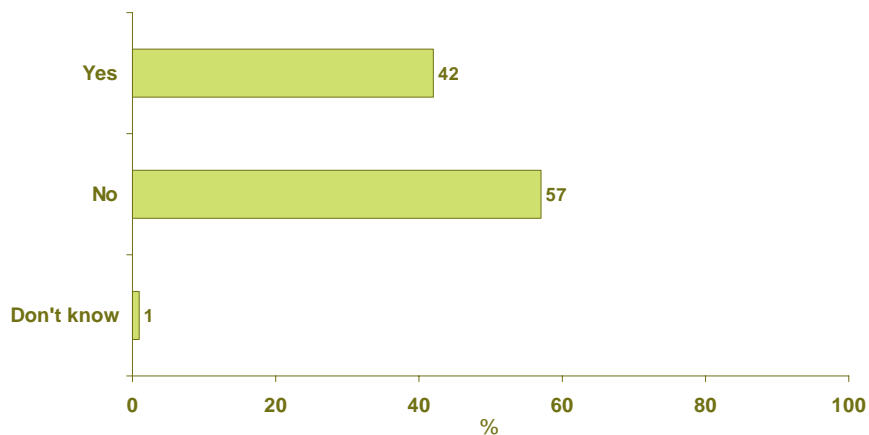
### Training undertaken and preferred suppliers

3.74 The following section of this report investigates the level of satisfaction with the training received in the past 12 months. Overall, 42% of respondents reported that either they or their direct employees, excluding apprentices and/or trainees, received on-the-job training over the past year.

**Figure 3.37**

Base: 508

Have you or any of your direct employees, excluding apprentices, received on-the-job training in the past 12 months?



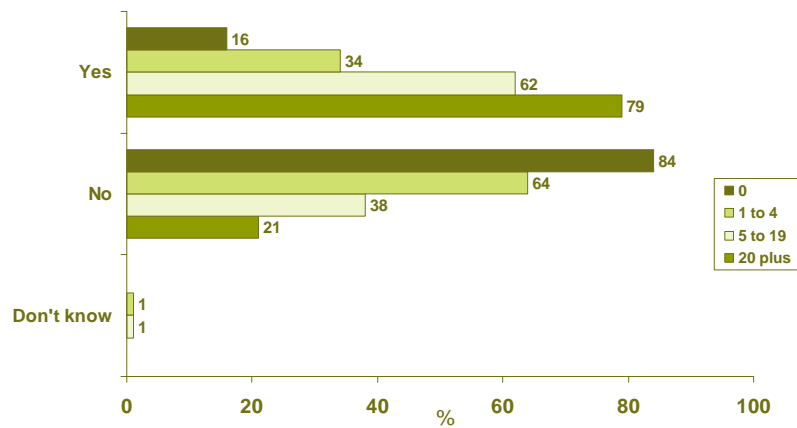
PricewaterhouseCoopers LLP

- 3.75 The figure outlined in Figure 3.37 is significantly lower than that reported in the Employer Attitudes and Motivations to Learning and Training (UK) report<sup>+</sup> in 2005 which stated that 64% of all employers had provided on-the-job training over the past year. This could be explained by the fact that the Employer Attitudes and Motivations to Learning and Training (UK) report did not include self-employed individuals in their questioning and these individuals are less likely to undergo training compared to larger firms.
- 3.76 As outlined in Figure 3.38, a greater proportion of larger employers have received on-the-job training over the past year compared to smaller employers or sole traders.

**Figure 3.38**

Base: 0 employees (105), 1 - 4 (218), 5 - 19 (136), 20+ (48)

Have you or any of your direct employees, excluding apprentices, received on-the-job training in the past 12 months?  
– By employee size



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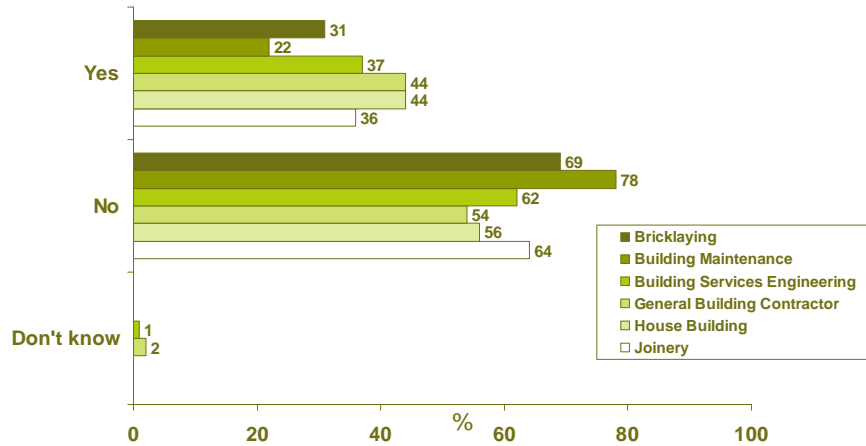
- 3.77 Figure 3.39 indicates that a significantly lower proportion of firms within the building maintenance sector received on-the-job training when compared with other sectors.

<sup>+</sup> Employer Attitudes and Motivations to Learning and Training, IFF Research Ltd prepared on behalf of ConstructionSkills. Published April 2005.

**Figure 3.39**

Base: Bricklaying (29), Building Maintenance (32), Building Services Engineering (97), General Building Contractor (57), House Building (57), Joinery (58)

Have you or any of your direct employees, excluding apprentices, received on-the-job training in the past 12 months?  
– By main business activity



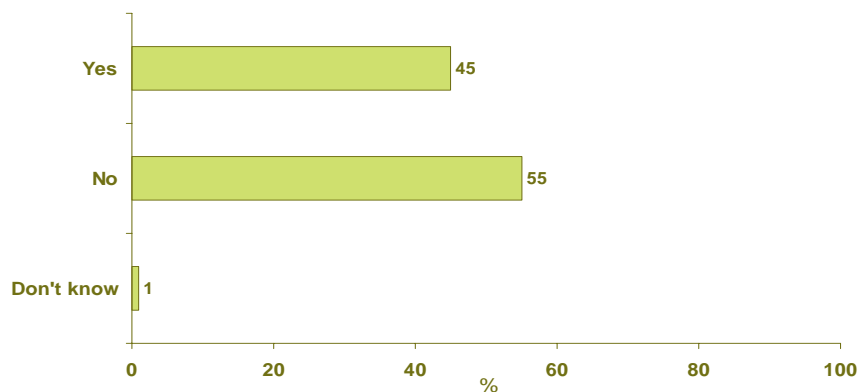
PricewaterhouseCoopers LLP

3.78 Respondents were then asked a similar question, but this time with respect to structured or formal training over the same time period. As illustrated in Figure 3.40, approximately half (45%) of all respondents reported that either they or their employees had received structured or formal training over the past year.

**Figure 3.40**

Base: 508

Have you or any of your direct employees, excluding apprentices, received structured or formal training over the past 12 months?



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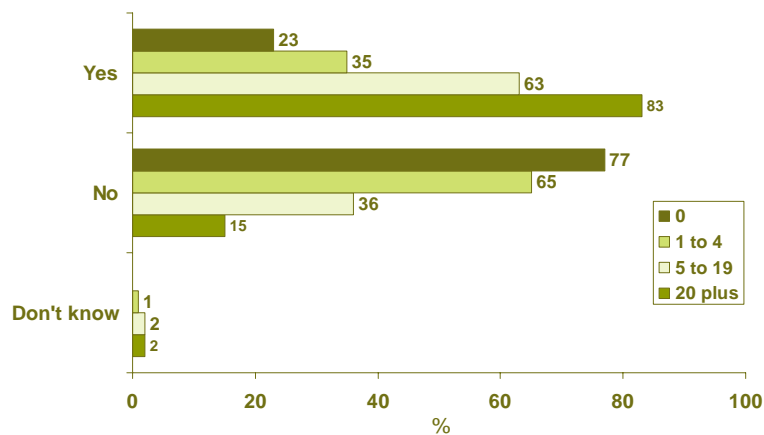
3.79 Whilst the question was asked slightly differently within the Employer Attitudes and Motivations to Learning and Training study<sup>+</sup> in 2005, approximately 40% of employers reported that their staff had received off-the-job training over the past year. This figure is consistent with the figure obtained from the current study.

3.80 Analogous with on-the-job training provision, a greater proportion of larger employers received formal training compared to smaller employers or sole traders, as illustrated in Figure 3.41.

**Figure 3.41**

Base: 0 employees (105), 1 - 4 (218), 5 - 19 (136), 20+ (48)

Have you or any of your direct employees, excluding apprentices, received structured or formal training over the past 12 months? – By employee size



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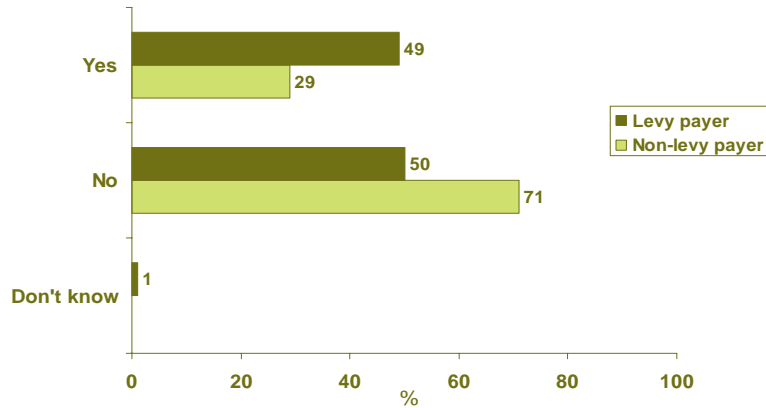
3.81 Levy-paying firms demonstrated a greater propensity to undertake formal training compared to non-levy paying firms. This is demonstrated in Figure 3.42.

<sup>+</sup> Employer Attitudes and Motivations to Learning and Training, IFF Research Ltd prepared on behalf of ConstructionSkills. Published April 2005.

**Figure 3.42**

Base: Levy payer (388), Non-levy payer (120)

Q31. Have you or any of your direct employees, excluding apprentices, received structured or formal training over the past 12 months? – By levy type



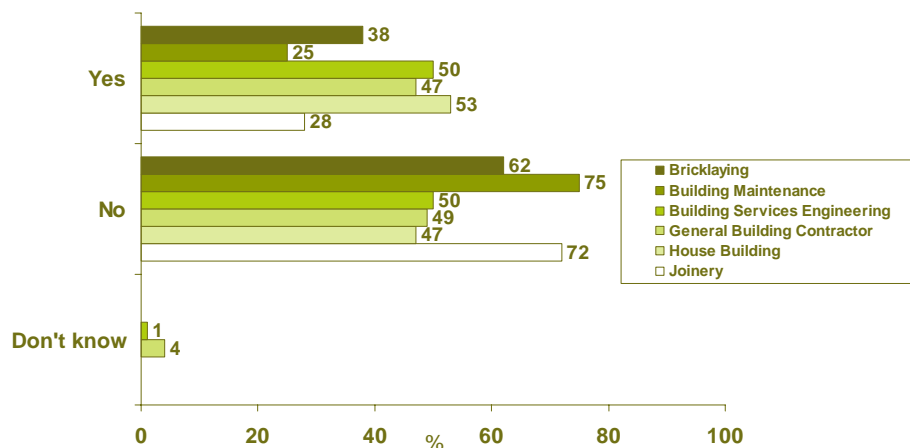
PricewaterhouseCoopers LLP

3.82 Comparable with the on-the-job training findings, significantly fewer respondents within the building maintenance arena underwent formal training in the past year. Moreover, a significantly greater proportion of joiners did not receive formal training over the last 12 months. This is highlighted in Figure 3.43.

**Figure 3.43**

Base: Bricklaying (29), Building Maintenance (32), Building Services Engineering (97), General Building Contractor (57), House Building (57), Joinery (58)

Have you or any of your direct employees, excluding apprentices, received structured or formal training over the past 12 months? – By main business activity



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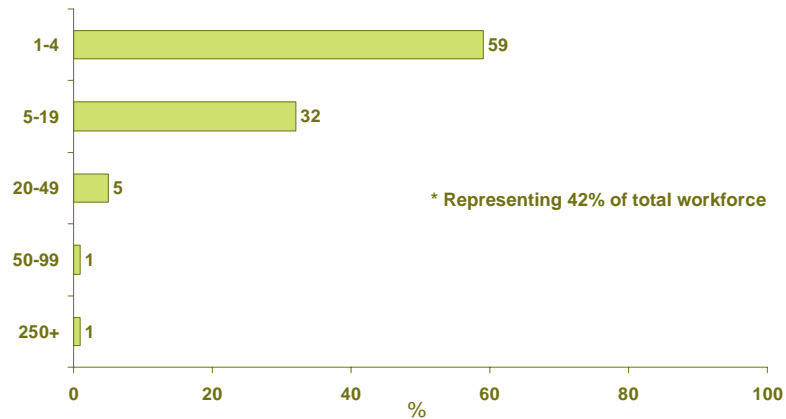
3.83 In order to provide an estimation of the percentage of employees that have received formal training in the past 12 month period, respondents were asked to provide the actual number of employees, including themselves, that have received such training. These findings can be

observed in Figure 3.44.

**Figure 3.44**

Base: Those who have provided training over the past year (226)

Including yourself, how many of your employees have undergone formal training in the last 12 months?



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- 3.84 It was calculated, based on the information provided by the respondents to this survey, that 42% of the total workforce had received formal training in the last year. Respondents reporting that staff had received formal training over the past 12 months (226) were subsequently asked which topics were covered during the training sessions.
- 3.85 As highlighted in Figure 3.45, the majority of those that had received formal training over the past 12 months had covered health and safety during their training sessions. Approximately 40% of those that had provided training in the past year had provided general induction training and more specific training in the use of new materials and/or techniques. A further 31% had reported that performance improvement training was provided to improve managerial/supervisory skills and to improve the skills and productivity of experienced staff. Less than 20% of respondents highlighted the provision of IT training.

**Figure 3.45**

Base: Those who have provided training over the past year (226)

In the past 12 months, which of the following topics were covered during the training sessions? – Top 6 responses



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3.86 The topics covered in the training sessions, as highlighted in Figure 3.45, are consistent in their proportions with the figures quoted within the Employer Attitudes and Motivations to Learning and Training (UK) study<sup>+</sup> in 2005. The current study however reports a much greater proportion of health and safety training (93%) compared to 75% within the UK study.

3.87 Training in the use of new materials and techniques appeared to be provided to a greater extent by the larger employers compared to their smaller counterparts. Generally, induction training, training to improve managerial/supervisory skills and training to improve the skills and productivity of experienced staff were undertaken by a greater proportion of larger employers. These findings can be observed in Figure 3.46.

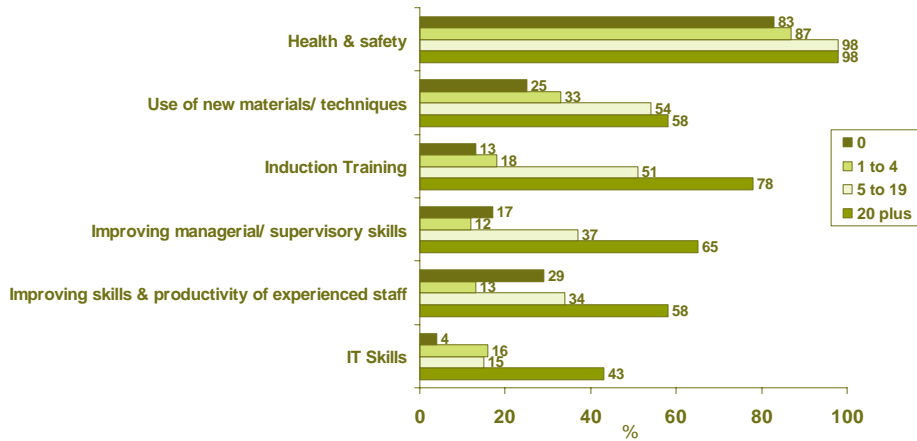
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<sup>+</sup> Employer Attitudes and Motivations to Learning and Training, IFF Research Ltd prepared on behalf of ConstructionSkills. Published April 2005.

**Figure 3.46**

Base: Those who have provided training over the past year. 0 employees (24), 1 - 4 (76), 5 - 19 (85), 20+ (40)

In the past 12 months, which of the following topics were covered during the training sessions? – Top 6 responses by employee size



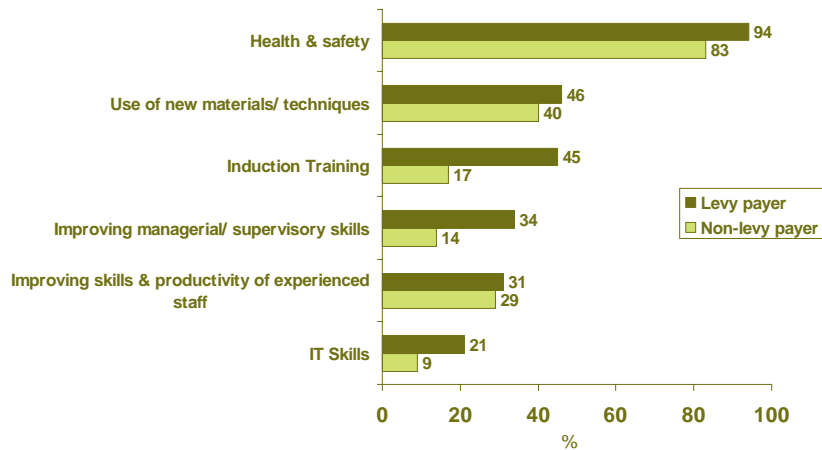
PricewaterhouseCoopers LLP

3.88 Induction training, training to improve managerial/supervisory skills and IT training were less represented throughout non-levy payers training compared to training received by levy payers.

**Figure 3.47**

Base: Those who have provided training over the past year. Levy payer (191), Non-levy payer (35)

In the past 12 months, which of the following topics were covered during the training sessions? – Top 6 responses by levy type



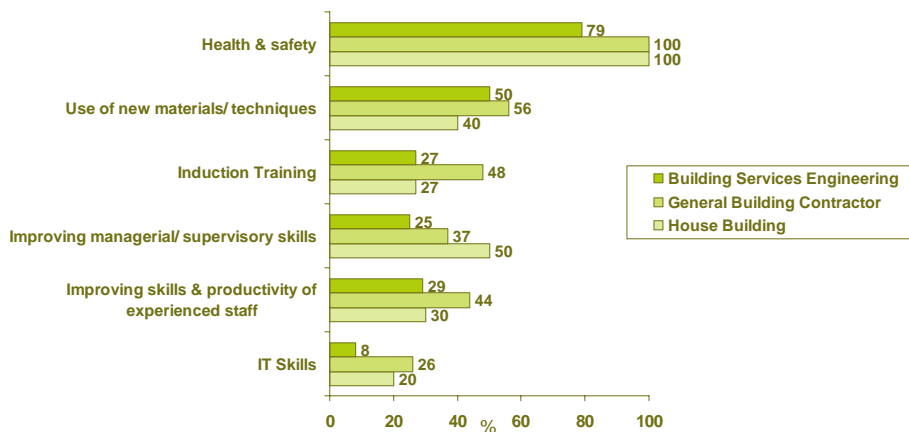
PricewaterhouseCoopers LLP

3.89 Figure 3.48 illustrates the topics covered during the formal training provided to the building services engineering sector, general building contractors and house builders over the past year. The base sizes of the other sectors were too small to permit meaningful comparisons.

**Figure 3.48**

Base: Those who have provided training over the past year. Building Services Engineering (48), General Building Contractor (27), House Building (30)

In the past 12 months, which of the following topics were covered during the training sessions? – Top 6 responses by main business activity



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3.90 As illustrated in Figure 3.48, only 79% of building services engineering firms received health and safety training compared to 100% of the other main activities included in the chart. A greater proportion of general building contractors covered induction training and productivity improvement skills during their formal courses compared to both building services engineering and house building sectors.

3.91 A significantly greater proportion of house building firms provided training to improve managerial/ supervisory skills compared to the other sectors highlighted.

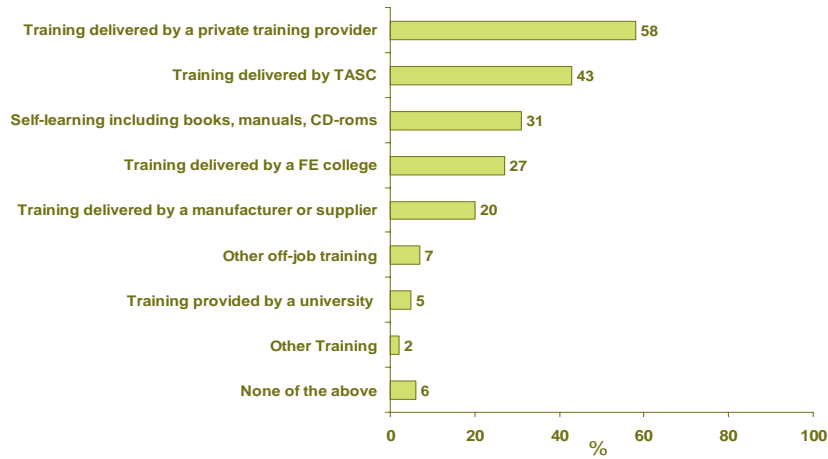
3.92 All respondents who had received/provided formal or structured training over the past year (226) were asked if they had received any of the following training courses/activities included in Figure 3.49.

3.93 Of those firms that had provided formal or structured training in the last year (226), the greatest proportion had received training delivered by a private training provider (58%). Just over 40% reported that they had received training delivered by TASC (Training and Assessment Services for Construction) CITB (NI)'s direct training division. Self-paced learning including books and CD-Roms was undertaken by approximately one-third of all respondents that had undergone structured or formal training. Additionally, approximately one in five reported that their staff had received formal training directly from a manufacturer or supplier.

**Figure 3.49**

Base: Those who have provided training over the past year (226)

Have you, or any of your employees received any of the following in the past 12 months?



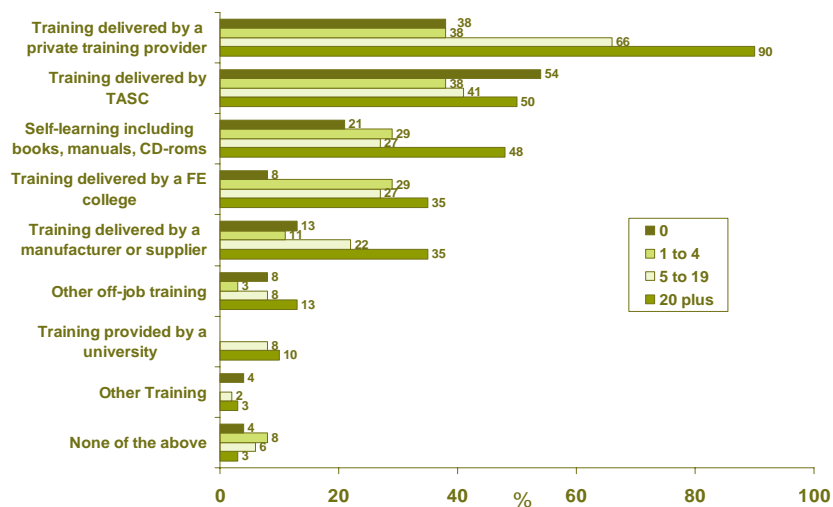
PricewaterhouseCoopers LLP

- 3.94 Figure 3.50 illustrates the variety of training delivery mechanisms used by the 226 respondents that have provided or received training over the past year, analysed by employee size. Firms with less than five employees appear to have received training primarily from TASC and private training providers. Two-thirds of employers with a workforce of 5-19 have received training by a private training provider, followed by TASC (41%).
- 3.95 Employers with more than 20 staff have received a variety of training through a number of delivery channels, however, the most commonly cited channel was via a private training provider (90%).

**Figure 3.50**

Base: Those who have provided training over the past year. 0 employees (24), 1 - 4 (76), 5 - 19 (85), 20+ (40)

Have you, or any of your employees received any of the following in the past 12 months? – By employee size



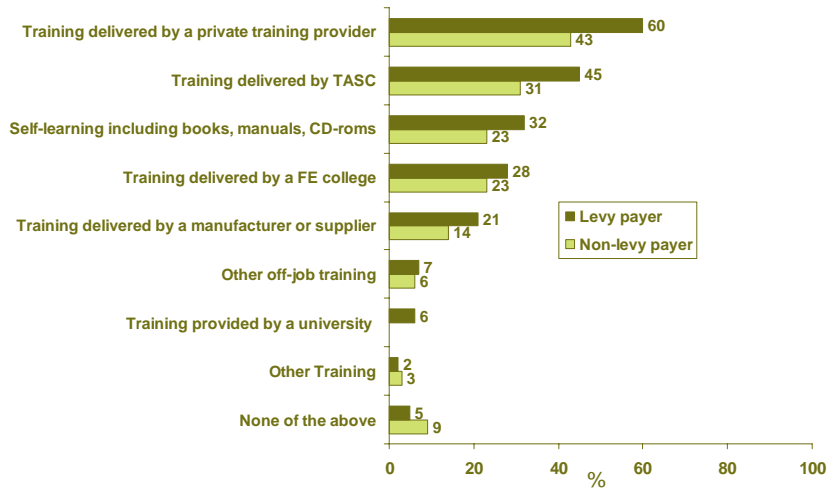
PricewaterhouseCoopers LLP

3.96 In general, a greater proportion of levy payers received training across each of the delivery channels outlined previously compared to their non-levy paying counterparts.

**Figure 3.51**

Base: Those who have provided training over the past year. Levy payer (191), Non-levy payer (35)

Have you, or any of your employees received any of the following in the past 12 months? – By levy type



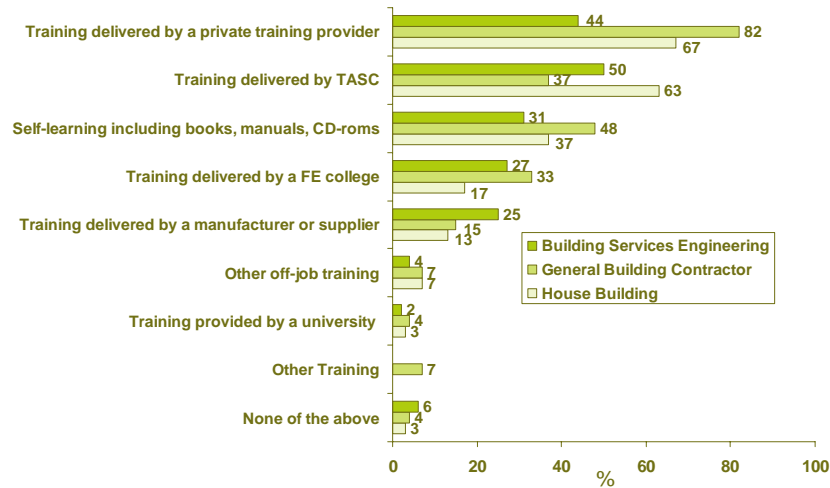
PricewaterhouseCoopers LLP

3.97 As outlined in Figure 3.52, training delivered by TASC and private training providers were the two most common methods of training delivery for the building services engineering sector. Training supplied by private providers was the primary source of training provision for general building contractors, followed by self-learning. Respondents from the house building sector received training primarily from private suppliers and TASC. The base sizes for other sectors that had received formal training over the past year were too small to permit meaningful sub-analysis.

**Figure 3.52**

Base: Those who have provided training over the past year. Building Services Engineering (48), General Building Contractor (27), House Building (30)

Have you, or any of your employees received any of the following in the past 12 months? – By main business activity



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3.98 Subsequently, respondents were asked to state how satisfied or dissatisfied they were with each of the training channels they used. Figure 3.53 presents the satisfaction levels obtained for those that had been used by a minimum of 30 respondents in order to provide meaningful results.

**Figure 3.53**

Base: FE (62), TASC (97), Manufacturer (45), Private Training Provider (130), Self-learning (69)

How satisfied are you with the quality of training provided by:



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3.99 As outlined in Figure 3.53, satisfaction levels across each delivery stream was very high, particularly in relation to the training delivery by TASC. Whilst the satisfaction levels are very

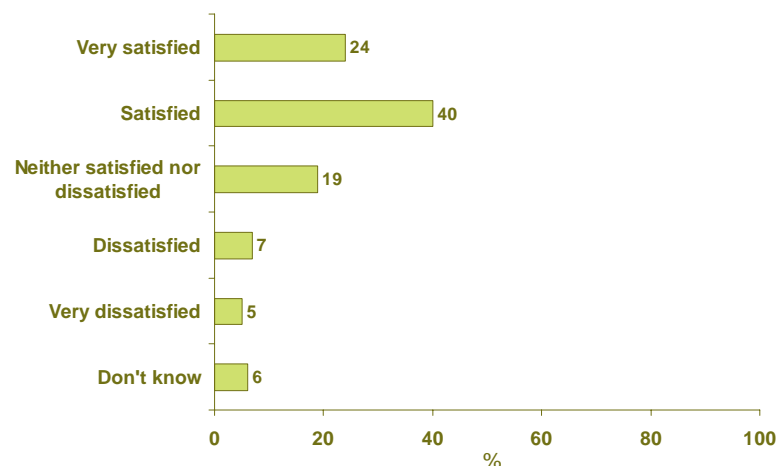
positive, there still remains scope for improvement as a significant proportion of respondents have reported that they were neither satisfied nor dissatisfied with the training received by each of the providers/methods outlined above. Moreover, almost 10% of respondents that had experienced private training providers were dissatisfied with the training received.

- 3.100 Attendees at the post-survey workshop were in agreement with the survey findings which highlighted a higher level of satisfaction amongst those who received training through TASC compared to other training providers. The participants stated that TASC represented a Centre for Excellence in terms of training in the construction industry compared to the other training providers that were listed.
- 3.101 Respondents were later asked to consider the relevance and range of training provided locally. Of those that had received training over the past year (226), 64% stated that they were either 'satisfied' or 'very satisfied' with the range and relevance of training. However, a significant proportion (12%) held an opposing view. Approximately 20% of respondents had no strong opinion with respect to the matter.

**Figure 3.54**

Base: Those who have provided training over the past year (226)

How would you rate the range and relevance of the training provided locally?



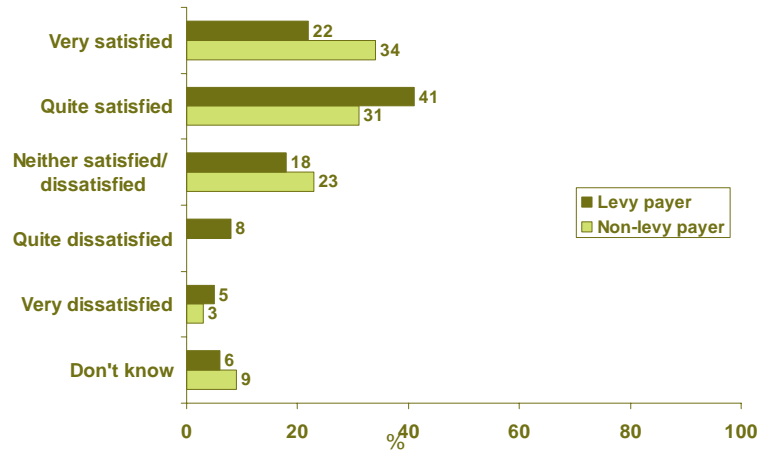
PricewaterhouseCoopers LLP

- 3.102 Of the 26 respondents that stated they were dissatisfied with the range and relevance of the training provided locally, the main reasons for their displeasure included: 'no training providers in local area/too far to travel', 'limited availability of relevant courses', 'the quality of training is poor' and 'the costs are too high'.
- 3.103 As indicated by the Figure 3.55, a greater proportion of non-levy paying firms rated the range and relevance of training as 'very satisfied' compared to levy payers, who had a greater propensity to state 'satisfied'. Moreover, the levels of dissatisfaction were significantly greater amongst levy payers (13%) compared to those that did not currently pay a levy (3%).

**Figure 3.55**

Base: Those with employees who have received training over the past year. Levy payer (191), Non-levy payer (35)

How would you rate the range and relevance of the training provided locally? – By levy type



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3.104 Within the workshops, a key discussion point in terms of training was the level of training undertaken. It was the general viewpoint that many individuals within the industry train as far as NVQ level 2, however, it was reported that very few continue to train past this point. Respondents noted that NVQ level 2 should be the foundation for training and subsequent training should be undertaken by all individuals.

### Barriers and motivators to training

3.105 In order to ascertain the primary motivation of firms to provide training, respondents were asked to provide the key factors that influenced the decision to provide training or for undertaking training themselves. Figure 3.56 suggests that legislation requirements were the main driver for the provision of training throughout the industry. Approximately 20% of those that had provided training in the last year reported that health and safety and the professional development of employees were the key motivators in providing training.

3.106 Only 1 in 10 respondents that had provided training in the last year referred to the economic benefits of training in terms of increased productivity, increased competitiveness or operational effectiveness of the business. These findings are demonstrated in Figure 3.56.

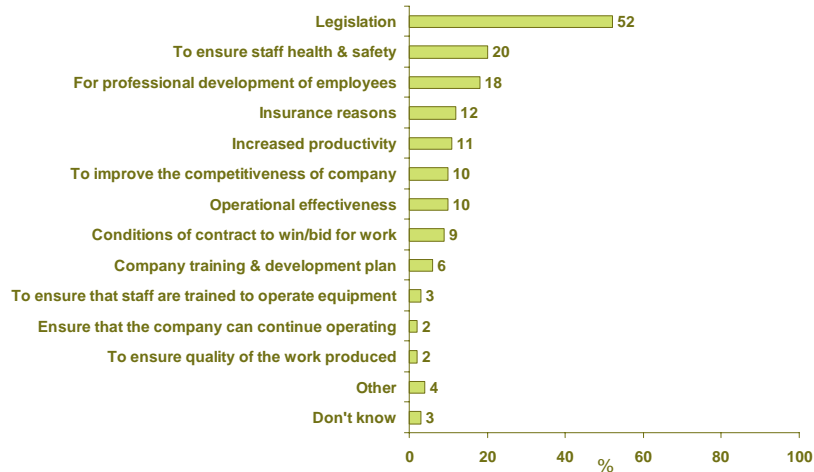
3.107 These findings are in agreement with the general opinion of the qualitative workshops which outlined that the main motivation for training provision was to comply with legislation or as a means of winning work.

3.108 The figure quoted in Figure 3.56, in terms of the percentage of respondents that stated 'the professional development of employees' as the key motivation for training provision, was of no surprise to those that attended the post-survey workshop. In their view, the lack of importance given to employee professional development, compared to meeting legislative requirements, highlights the need for more importance to be placed on the needs of the employee within the construction industry.

**Figure 3.56**

Base: Those who have provided training over the past year (226)

What have been the main factors that have influenced your decision to provide training to your employees or for undertaking training yourself?



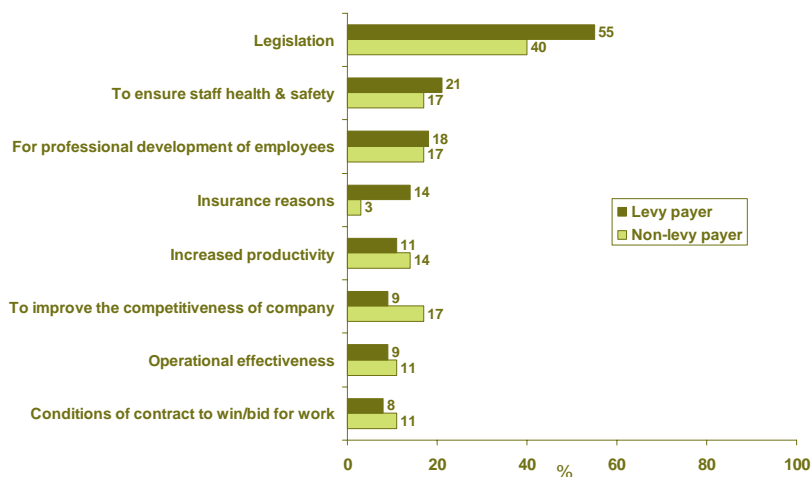
PricewaterhouseCoopers LLP

3.109 The key factors that have been influential in terms of providing training to employees were similar for both levy and non-levy paying firms. Legislative requirements, however, appear to have a greater influence on levy payers in comparison to non-levy payers. Moreover the insurance requirements placed on firms were also a major contributor to training provision amongst levy-paying businesses, much more than non-levy payers.

**Figure 3.57**

Base: Those who have provided training over the past year. Levy payer (191), Non-levy payer (35)

What have been the main factors that have influenced your decision to provide training to your employees or for undertaking training yourself? – By levy type



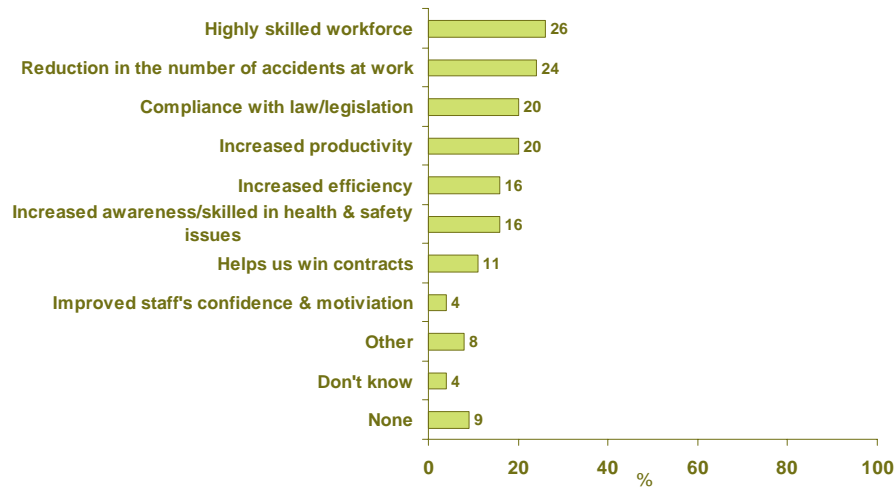
PricewaterhouseCoopers LLP

3.110 The 226 respondents that have provided or received training over the past year were asked to consider the benefits training has brought to their firm. The results obtained are highlighted in Figure 3.58.

**Figure 3.58**

Base: Those with employees who have received training over the past year (226)

What benefits, if any, has training brought your company?



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3.111 Approximately one-quarter of all those that had provided training to their staff in the past year held the belief that a highly skilled workforce or reductions in the number of accidents at work were the primary benefits of training. Compliance with the legislation requirements of the industry and increased productivity were cited as key benefits by 20% of respondents.

3.112 Whilst only 11% of the 226 firms that have provided training over the past 12 months reported that increased productivity was influential in their decision to provide training for the current workforce, 20% reported it as an actual benefit to the firm. This suggests that the economic benefits that training can bring to a company are not fully realised in the beginning.

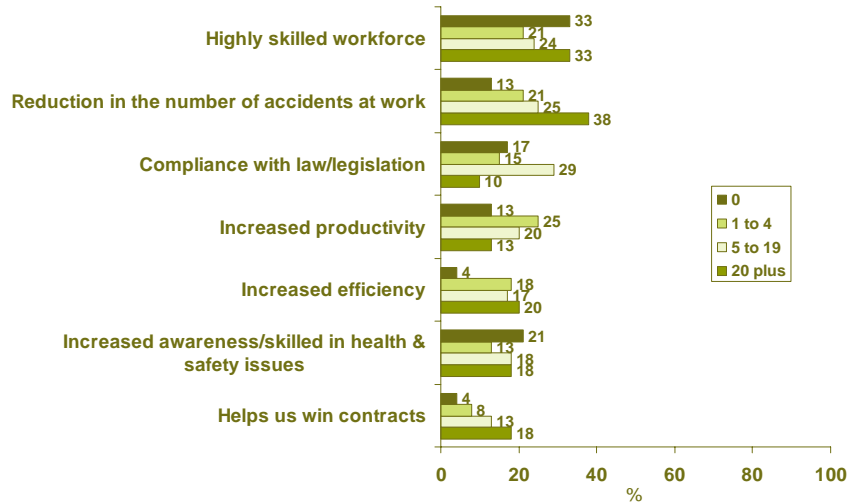
3.113 Illustrated in Figure 3.59 are the key benefits of training analysed by employee size. A greater proportion of larger employers appear to recognise a fall in the accident rate as a key benefit compared to the smaller employers. The ability to comply with the law and/or legislative requirements was of significant benefit to those firms with 5-19 employees.

3.114 In addition, the recognised benefit of the assistance in winning contracts increases as the size of the firm increases.

**Figure 3.59**

Base: Those with employees who have received training over the past year. 0 employees (24), 1 - 4 (76), 5 - 19 (85), 20+ (40)

What benefits, if any, has training brought your company?  
– By employee size



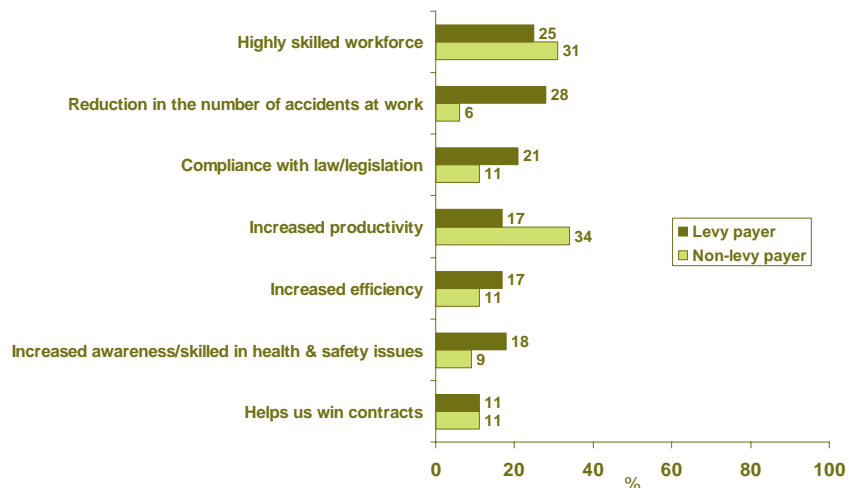
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3.115 Figure 3.60 highlights the responses of levy and non-levy paying firms to the same question.

**Figure 3.60**

Base: Those with employees who have received training over the past year. Levy payer (191), Non-levy payer (35)

What benefits, if any, has training brought your company?  
- By levy type



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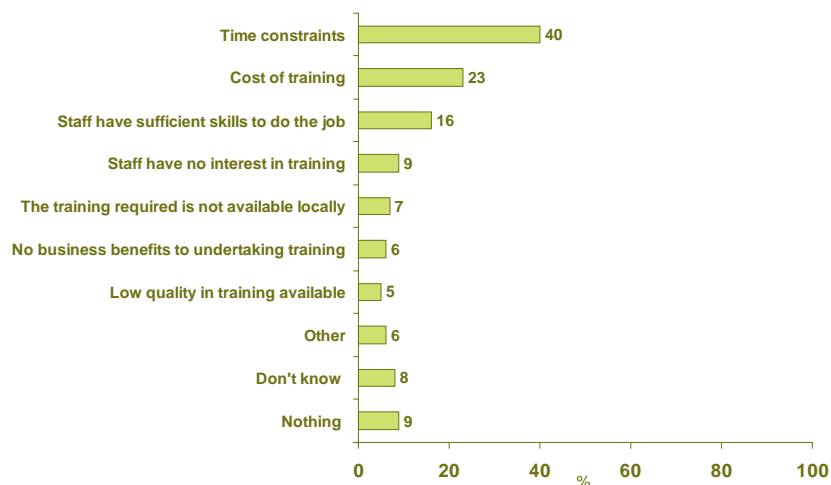
3.116 The reduction in the accident rate and the increased knowledge in the area of health and safety, in addition to complying with legislation, appear to be more widely recognised by levy payers when compared with non-levy payers.

- 3.117 For those that have provided training (226), the main benefit training has brought to non-levy paying firms appears to be ‘increased productivity’ (34%), followed by ‘a highly skilled workforce’ (31%).
- 3.118 By means of contrast, a reduction in the number of accidents at work (28%), followed by the improved skill-set of employees (25%), were the main benefits reported by levy-paying firms.
- 3.119 An equally important element of the study was to ascertain the barriers preventing firms providing training to their workforce. As suggested by Figure 3.61, ‘time constraints’ was the greatest deterrent to training provision (40%) for the 278 firms that have not provided training over the past year. Whilst some way behind the issue of time constraints, ‘the cost of training’ was considered by approximately one-quarter of non-training firms as a major obstacle to training. 16% of firms that do not currently provide training to staff were of the opinion that their staff have the necessary skills to do the job required and therefore do not require training.
- 3.120 Approximately 15% of firms that have not provided staff training in the past year have listed barriers that are a result of the negative mind-set of the individual or firm – for example, ‘no business benefits to training’ or ‘the staff have no interest in training’.

**Figure 3.61**

Base: Those with employees who have NOT received training over the past year (278)

What do you consider to be the main barriers to providing training for you or your employees?



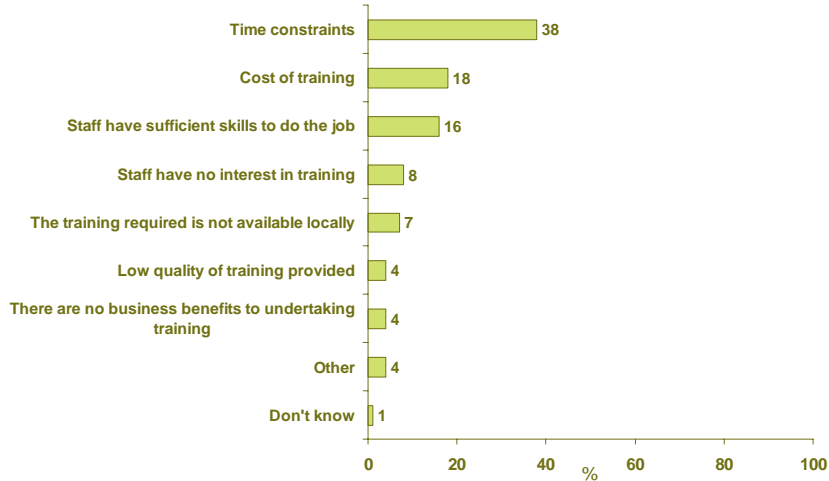
PricewaterhouseCoopers LLP

- 3.121 The same question was posed to the same respondents that have not provided or received training in the past year, but this time respondents were only asked to provide the one barrier that has the greatest impact on the level of training undertaken by their firm.
- 3.122 Once again, the top three barriers remain unchanged – ‘time constraints’, ‘the cost of training’ and ‘staff have sufficient skills to do the job’.

**Figure 3.62**

Base: Those who have NOT provided training over the past year and gave an answer at Q41 (231)

Which potential barrier has the greatest impact on the level of training provided by your company?



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3.123 Figure 3.63 displays the single greatest barrier to training for those that have not provided or received training over the past year, split by employee size.

**Figure 3.63**

Base: Those with employees who have NOT received training over the past year and gave an answer at Q41. 0 employees (67), 1 - 4 employees (114), 5 - 19 (44)

Which potential barrier has the greatest impact on the level of training provided by your company? – By employee size



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3.124 'Time constraints' was the greatest deterrent for all sizes of company but particularly so for the 5-19 group. It is not surprising that the small employers/sole traders have more issue with the costs associated with training compared to the larger firms.

3.125 The constraint on time was the greatest deterrent for both levy-paying firms (44%) and non-levy payers (24%). The cost of training and ‘staff have sufficient skills to do the job’ were also cited by non-levy payers as the key barriers to training with approximately 20% stating these issues.

**Figure 3.64**

Base: Those with employees who have NOT received training over the past year and gave an answer at Q41.  
Levy payer (161), Non-levy payer (70)

Which potential barrier has the greatest impact on the level of training provided by your company? – By levy type



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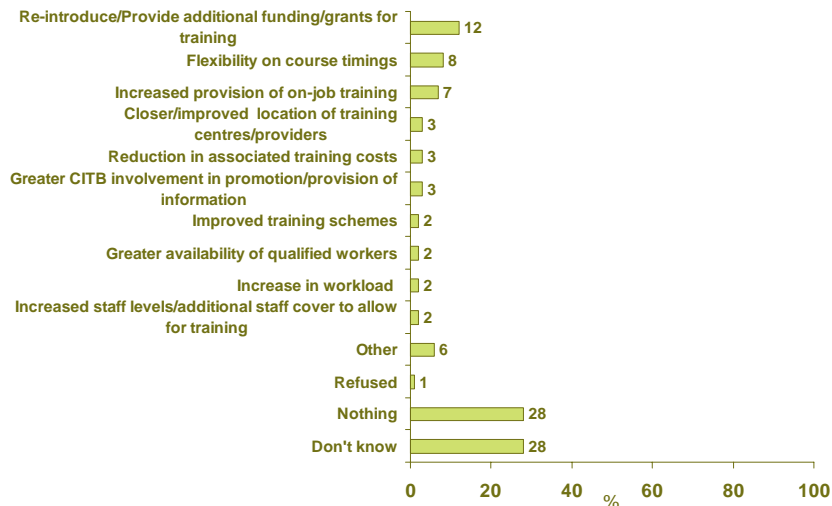
3.126 Once the barriers to training provision were identified by those firms that do not currently provide training for their staff (278), the same respondents were then asked what could be done to overcome or reduce such barriers. Over half of such respondents (56%) could not suggest a resolution to the issues faced by firms with respect to training provision, or they were of the opinion that nothing could be done.

3.127 Whilst the top response to the question posed to the 278 respondents was the provision of additional/increased funding, this only represents 12% of respondents. Therefore, it appears that in instances where respondents have stated ‘cost’ as a key barrier to training provision, a direct resolution such as additional funding can be found. However, when it comes to the issue of ‘time constraints’ and releasing workers to attend training courses, the solution is much more difficult to find. In many cases it would appear that respondents do not know how to resolve this problem, and this is illustrated with the large proportion of ‘don’t know’ and ‘nothing’ in Figure 3.65.

**Figure 3.65**

Base: Those who have NOT provided training over the past year (278)

What could be done to overcome or reduce the barriers to training?



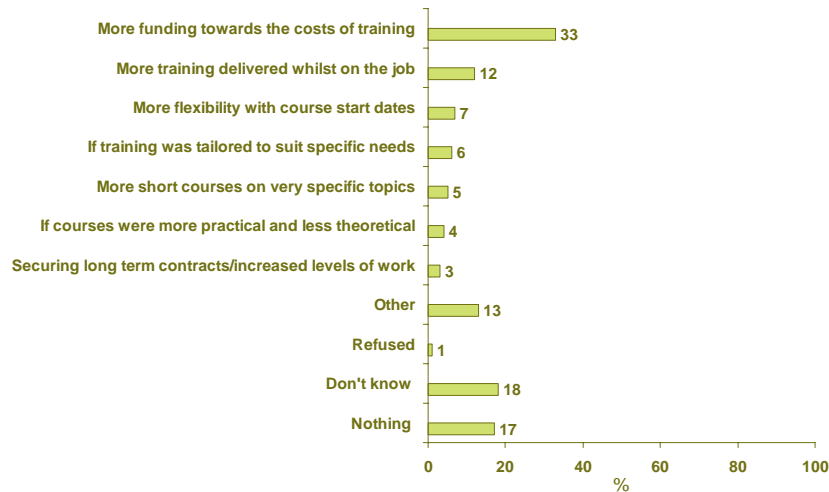
PricewaterhouseCoopers LLP

- 3.128 When the results outlined above were analysed by company size, other than 'don't know' or 'nothing', the provision of funding was the main action cited by small firms (less than five employees) in terms of addressing the barriers to training. The flexibility of course timings was the primary solution reported by those with five or more employees. The base size for the 20 plus employee size band was insufficient to draw meaningful conclusions. No significant differences were observed with the main business activity analysis with respect to this question.
- 3.129 Moving on from the barriers to training, respondents that do not currently provide training (278) were subsequently asked what would encourage them to provide more training. One-third of such respondents reported that increased funding would offer an incentive to provide more training. Just over 10% believed that more on-the-job training would be helpful, with a further 4% stating that more practical courses would encourage them to offer more training.
- 3.130 Approximately 1 in 20 firms that have not provided training reported the need for tailored or specific training to address individual needs rather than generic training. Approximately 40% of respondents were unable to provide a specific response to the question. Figure 3.66 outlines these findings.
- 3.131 There were no significant differences observed with respect to employee size.

**Figure 3.66**

Base: Those who have NOT provided training over the past year (278)

What would encourage you to provide more training for you or your employees?



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- 3.132 Both the quantitative and qualitative findings reported ‘cost’ and ‘time constraints’ as the two key barriers to training provision. The qualitative workshops highlighted that it is often difficult for an employer to make the decision on whether to release an employee for training or to keep them on site to deliver work to a client as agreed. Respondents outlined that training is often put on hold when work or a contract needs delivered.
- 3.133 With respect to costs, participants outlined that it is not only the direct costs associated with the training course itself, but also the indirect cost of the work foregone by the staff members being off site to undertake the training. The option of on-site mobile training facilities was mentioned by a few participants during the group discussions as a method of addressing the issue of releasing staff from the job site to attend training sessions.
- 3.134 A small number of respondents were of the opinion that if training is vital to the industry, clients should accept the higher costs when construction firms quote for work; as the cost of training has to be covered. The same respondents stated that it is difficult to find money for training when clients are seeking the lowest price for a job.

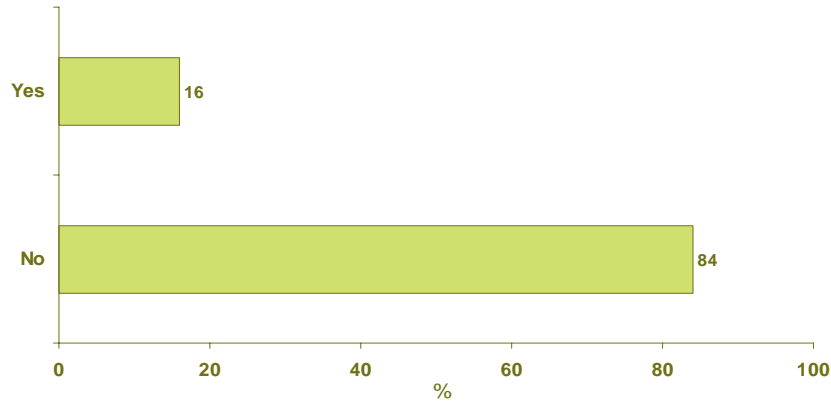
### Migrant workers

- 3.135 The final section of the questionnaire investigated the area of migrant workers. Approximately 20% of those firms that have one or more employees (402) reported that they currently employ non-national workers within their workforce. It is worth mentioning that the figures stated in Figure 3.67 exclude workers from the Republic of Ireland, as the remit of the assignment was to investigate the proportion of non-UK and Ireland workers only.

**Figure 3.67**

Base: All those with 1 or more employees (402)

Do you currently employ workers that are non-UK citizens or non-UK passport holders, excluding anyone from the Republic of Ireland?



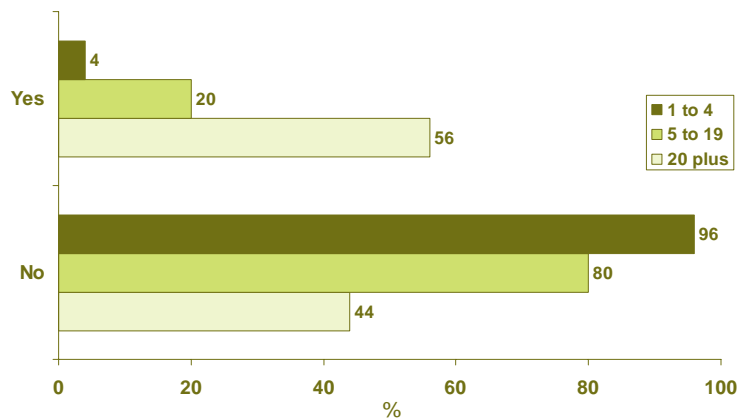
PricewaterhouseCoopers LLP

3.136 Figure 3.68 indicates that a greater proportion of the larger employers currently have non-national workers within their workforce.

**Figure 3.68**

Base: All those with 1 or more employees. 1 - 4 (218), 5 - 19 (136), 20+ (48)

Do you currently employ workers that are non-UK citizens or non-UK passport holders, excluding anyone from the Republic of Ireland? – By employee size



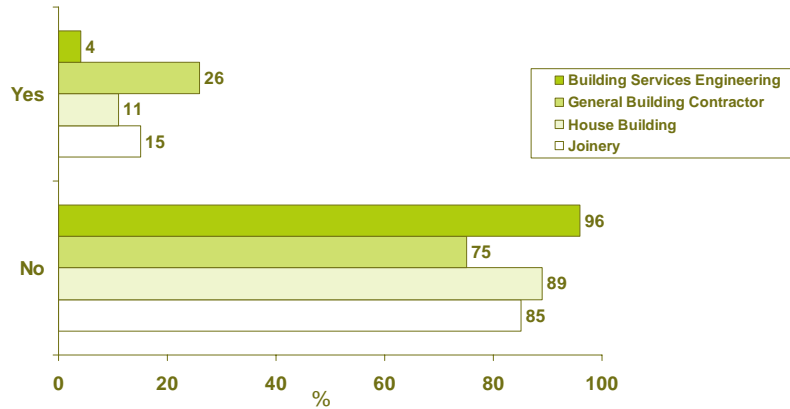
PricewaterhouseCoopers LLP

3.137 Figure 3.69 illustrates that a significantly greater proportion of general building contractors employ non-national workers compared to the other main business activities. Please note that not all sectors are represented in Figure 3.69 due to insufficient base sizes.

**Figure 3.69**

Base: All those with 1 or more employees. Building Services Engineering (71), General Building Contractor (47), House Building (45), Joinery (46)

Do you currently employ workers that are non-UK citizens or non-UK passport holders, excluding anyone from the Republic of Ireland? – By main business activity



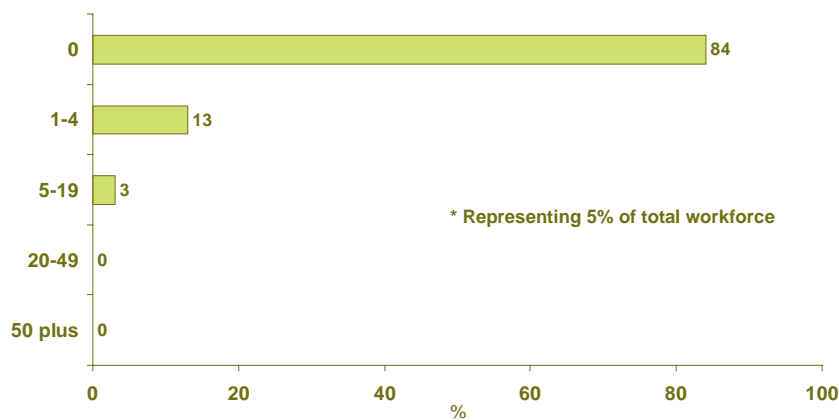
PricewaterhouseCoopers LLP

3.138 Those firms with one or more employees (402) were asked to provide the total number of non-national workers currently employed within the company. The individual figures provided were summed and expressed as a percentage of the total workforce previously provided; hence it was calculated that 5% of the total workforce of those surveyed were non-national workers.

**Figure 3.70**

Base: All those with 1 or more employees (402)

In total, how many non-national workers are currently employed in your company?



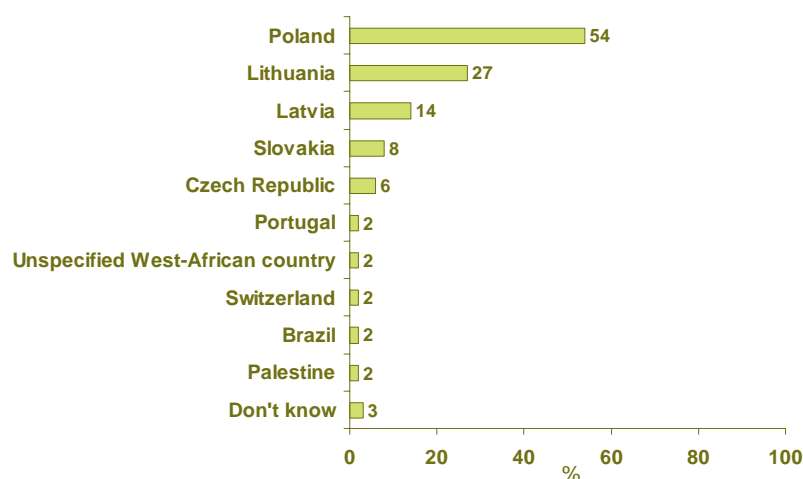
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- 3.139 The 5% figure, as illustrated previously, is also consistent with that reported in the National Skills Bulletin (ROI)<sup>+</sup> in 2005 which reported that 4.6% of the construction industry workforce was from outside of Ireland. In addition, the Sector Skills Draft Agreement report<sup>++</sup> in 2005 also stated that non-national workers represented between 1 - 4.5% of the construction industry. Moreover, the report into Employer Attitudes and Motivations to Learning and Training (NI)<sup>+++</sup> in March 2006 cited that approximately 3% of the Northern Ireland construction industry was non-national workers.
- 3.140 The 5% non-national workforce figure estimated in the quantitative survey was considered low by the participants of the post-survey workshop. The group believed that this figure only represented those migrant workers who have registered through Home Office and have received a national insurance number and therefore can obtain CSR (Construction Skills Register) cards. It was the general viewpoint that the figures provided by the survey respondents did not include migrant workers who did not hold CSR cards.
- 3.141 In order to gain insight into the origin of non-national workers, respondents employing non-national workers (63) were asked to state where their non-national workers originated from.
- 3.142 The three main countries of origin for non-national workers operating within the Northern Ireland construction industry were Poland, Lithuania and Latvia, with half of all firms employing migrant workers reporting they had Polish workers, 27% with Lithuanian workers and 14% with Latvian workers.

**Figure 3.71**

Base: Only those with non-national employees (63)

Thinking only about non-national employees – which countries do they originate from?



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- 3.143 Throughout the qualitative discussions, Poland, Latvia and Lithuania were also commonly

+ National Skills Bulletin 2005, Skills and Labour Market Research Unit of FAS for the Expert Group on Future Skills Needs. Published September 2005.

++ Sector Skills Agreement Draft. Stages 1-3 for the Construction Industry in Northern Ireland (Version 2), ConstructionSkills. Published November 2005. Whilst the figure was quoted in the aforementioned report, the original source was taken from the Northern Ireland Census of Employment 2001 and work originally undertaken by CITB (NI).

+++ Employers Attitudes and Motivations to Learning and Training (Northern Ireland), IFF Research Ltd, prepared on behalf of CITB–ConstructionSkills. March 2006.

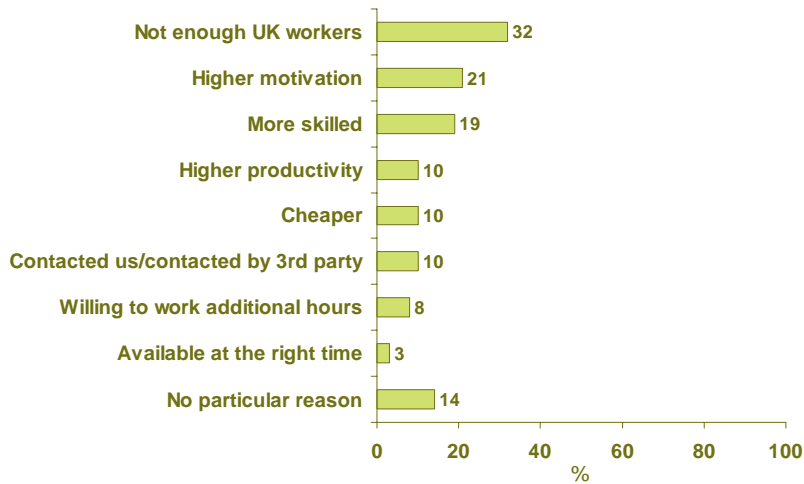
cited as the main countries of origin for non-national workers.

- 3.144 As outlined in Figure 3.72, almost one-third of employers that currently employ non-national workers cited their main reason for doing so was the lack of UK workers. Approximately 20% of such employers held the opinion that non-national workers are more highly motivated or more skilled than national workers. Only 10% of firms employing non-national workers considered them to be a cheaper source of labour.

**Figure 3.72**

Base: Only those with non-national employees (63)

What are the main reasons for employing non-national workers?



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- 3.145 The findings above are consistent with those obtained from the Employer Attitudes and Motivations to Learning and Training (NI)<sup>+</sup> study published in March 2006. A slightly greater proportion of employers within the UK study reported the lack of UK workers as the primary reason for recruiting non-national workers (45%); and a smaller proportion stated 'higher motivation' (11%) compared to the present study.
- 3.146 The general consensus of those who participated in the qualitative workshops was that non-national workers were primarily recruited due to the lack of availability of UK workers. The majority of the respondents also stated that their high motivation levels and their flexibility to work outside traditional construction working hours made them an attractive option for recruitment. A small number of participants reported that the main motivation behind employing non-national workers was a cheaper source of labour.
- 3.147 Figure 3.73 highlights that despite employing non-national workers, over half of the 63 employers do not believe there have been any additional training needs as a result of hiring such staff. However, approximately one-quarter of employers reported that health and safety and language training was necessary.
- 3.148 These views were replicated in the qualitative study, were the majority of workshop attendees were of the opinion that no additional training was required by non-UK workers. A number of respondents, however, did highlight the need for training in the area of health and

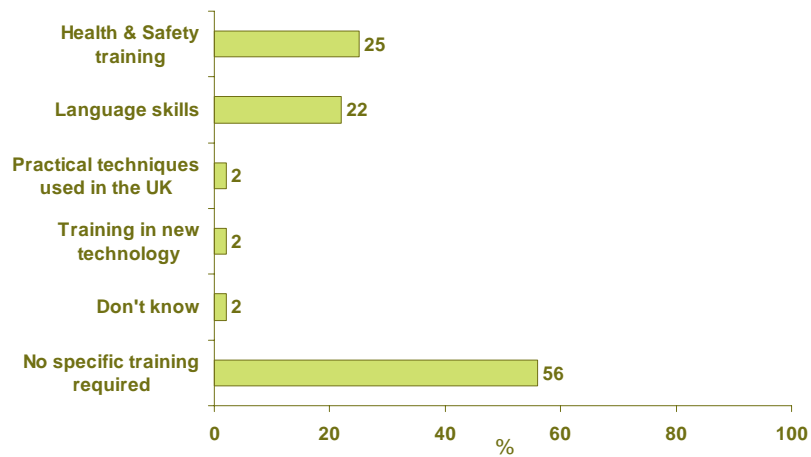
<sup>+</sup> Employer Attitudes and Motivations to Learning and Training (Northern Ireland), IFF Research Ltd prepared on behalf of CITB–ConstructionSkills. Published March 2006.

safety and the English language.

**Figure 3.73**

Base: Only those with non-national employees (63)

Have there been any specific training or assessment needs arising as a result of recruiting non-national workers?



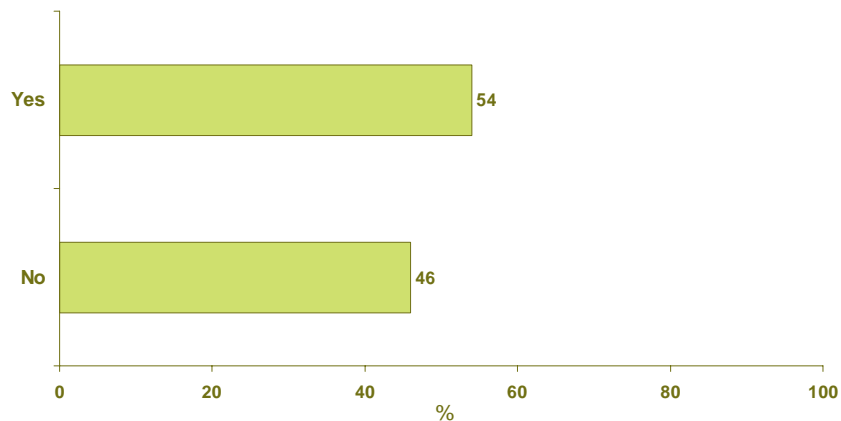
PricewaterhouseCoopers LLP

3.149 Respondents employing non-national workers were asked if any of their non-national workforce had difficulty speaking English. The viewpoint was mixed, with approximately half stating 'yes' and half stating 'no'.

**Figure 3.74**

Base: Only those with non-national employees (63)

Do any of your non-national workforce have difficulty speaking English?



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- 3.150 It was calculated that approximately 37% of the non-national workforce population has difficulty speaking English based on the raw figures provided by respondents.
- 3.151 When questioned about the measures taken to address the language issues, the main responses included informal actions such as the use of on-site translators (27%) and the use of signs/showcards and phrase books (21%). However, 18% of employers with non-national employees cited that they organised or enrolled the worker(s) in a language course.

# 4 Conclusions and recommendations

## Conclusions

4.1 We have set out our conclusions under the headings of the terms of reference.

### **The level of skills gaps and skills shortages within the NI construction industry**

4.2 Almost one-third of all firms reported that they had experienced recruitment difficulties over the past year, particularly in relation to the sourcing of general operatives and/or labourers. The difficulties experienced during the recruitment exercise were not a result of a lack of interest, although it was a factor, it was primarily as a result of the low number of applicants possessing the skills required to occupy the position advertised.

4.3 Only a small minority of respondents (5%) were of the opinion that members of their current workforce lacked the necessary skills required to do their job to the best of their ability. Of those respondents that held this viewpoint, technical and/or practical specific skills were cited as the main area for improvement.

### **The preferred methods and sources of learning and training provision;**

4.4 In terms of the level of training undertaken within the construction industry it was estimated that, on average, 42% of the total workforce underwent formal training over the past year. Of those that had provided training to their employees, or received training themselves, over 90% reported that health and safety guidance was covered during the training sessions. Although some way behind the topic of health and safety, training on the use of new materials/techniques (45%) and induction training (41%) where the next most commonly cited topics covered during the training undertaken.

4.5 For those firms that provided training to their staff over the past year, satisfaction levels with training providers were very positive, particularly with respect to the training provided by TASC. Whilst this was a strong performance overall, improvements can still be made throughout the entire training network – particularly with the minority of respondents that rated the training as neither good nor bad or said that they were discontented with the training.

### **The barriers as well as the drivers and motivators behind the decision to provide and/or access continued learning and training.**

4.6 Respondents that had provided training to employees or received training themselves reported that the greatest influence in their decision to provide training was 'legislation' (52%). Improvements in the area of health and safety, and the professional development of employees, were cited as key drivers by approximately 20% of respondents.

4.7 For those firms that had not provided training over the past year, respondents claimed that the greatest barrier to training provision was 'time constraints', and to a lesser extent 'the cost of training'. Whilst respondents were able to provide a solution for the cost of training, i.e. increased funding/additional funding, they were unable to provide a resolution for the issue of time constraints.

- 4.8 Only 10% of respondents cited that economic benefits associated with training was a key factor in providing training for staff.

**The sources of new entrants to the industry, the training carried out by new entrants and employer attitudes to the employment of new entrants**

- 4.9 The research on this issue focused on those entering the industry via a formal apprenticeship and/or trainee route. Currently, just under 30% of all firms surveyed have apprentices and/or trainees on formal training courses. The main reason cited for hiring the apprentices was to provide the industry with more craftspeople for the future. Conversely, the main reasons provided for not employing such individuals were 'no need at present' (32%), followed by 'too much hassle' (19%).
- 4.10 Under half (45%) of all respondents who have apprentices and/or trainees spending time at college or with a training provider stated that they were satisfied with the quality of training provided to their apprentices. However, one in five firms with apprentices or trainees on formal training programmes reported that they were dissatisfied with the quality of training provided. The greatest criticism with respect to the training provided to apprentices and/or trainees was the lack of practical training.
- 4.11 A number of individuals consulted during this programme of research indicated that the current training, particularly for apprentices, is too theoretical and not practical enough for the demands of the industry. A number of stakeholders and construction company representatives have reported that the lack of practical training is detrimental to the apprentices, particularly when it comes to employment. This is further supported by the survey findings where the principal skill set requiring improvement was reported as technical/practical or job-specific training.
- 4.12 In terms of encouraging respondents to take on apprentices and/or trainees in the future, for those that do not have apprentices at present, greater financial incentive was reported by the main incentive (24%). A further 17% reported that apprentices would be recruited if the workload of the company was to increase. A significant proportion (15%) also reported that increased motivation levels, and improved reliability, of the apprentices would encourage them to consider employing apprentices in the future. Contrastingly, almost one-fifth of respondents that do not currently employ apprentices were of the opinion that nothing would persuade them to take on apprentices in the future.

**The level of migrant workers employed in the construction industry and the implication in terms of training needs and provision; and**

- 4.13 It was estimated within this study that 5% of the total workforce were non-national workers. The majority of firms employing non-UK workers cited that their non-national workers originated from Poland, followed by Lithuania and Latvia.
- 4.14 The primary reason for employing such workers was not as a cheap source of labour but rather the lack of UK workers available for work. Despite originating from outside of the UK, over half of all employers employing non-UK citizens did not believe that additional training was required on the part of the non-national workers. By means of contrast however, approximately one-quarter of employers were of the opinion that health and safety and language training was necessary.
- 4.15 It was estimated that approximately 37% of current non-national workers have difficulty with the English language. However, most of the employers have adopted an informal approach to overcoming this difficulty such as the use of on-site translators or pictorial signage.

## **The composition of NI construction industry in terms of main company activity, gender and occupational profile of employees**

- 4.16 The survey captured the views and opinions of a cross-section of construction firms. Almost 20% of all respondents surveyed were from the building services engineering sector with approximately 10% operating within the general building contracting, joinery and house building sectors.
- 4.17 Using the raw figures provided by all respondents consulted, it was calculated that over 50% of all construction employees were employed within the craft/trade occupations with an additional 10% performing a clerical role within the firm. Just over 10% were employed within a managerial/supervisory function, with 18% employed within a professional/technical capacity.
- 4.18 The demographic profile of the firms included within this study confirms that the construction industry remains predominantly male. Of those surveyed, approximately 10% of employees were female, with the greatest proportion operating within a clerical capacity (79%).
- 4.19 In closing, the quantitative survey and the qualitative workshops have indicated that 'training' for most firms refers to equipping an individual with the appropriate knowledge or skill to do a particular job, or as a means of complying with current legislation and is often reactive rather than pro-active. Very few firms appear to think of training in terms of the continuous professional development of the individual, nor do they often think about the economic or financial benefit that training can bring to a company. This study suggests that many firms view training as an expenditure, either in terms of money or time, and this is reflected in the responses provided to the barriers and motivators of training.
- 4.20 In order to encourage more training within the industry, the distinction must be made between practical/job-specific training to equip an individual with the basic skills to perform a particular job and the ongoing learning and professional development of the individual. It has been suggested by representatives of the industry that the mindset of the industry needs to change and the benefits of training, in terms of mutual benefit to the employee and the employer, must be clearly and effectively communicated to firms of all sizes. The communication strategy, however, should be sensitive to the financial constraints that smaller firms frequently face which are often perceived as a major obstacle to training provision.

## **Recommendations**

- 4.21 The main purpose of this baseline research was to create an overall picture of the state of training within the construction industry in Northern Ireland. As such, the study has generated a comprehensive set of data which can be used as a basis for the development of training initiatives and strategies in the industry. We have made some initial recommendations based on the evidence arising out of this research.
- 4.22 This research has focused primarily on the demand side of the construction training market. Another key element on the formulation of a training strategy would be to undertake a programme of research on the supply side.
- We recommend that further research should be carried out on the supply of training across Northern Ireland; looking at the strengths, weaknesses, opportunities and constraints and considering best practice elsewhere.
- 4.23 Based on this study, the CITB (NI) may wish to consider initiating the process of developing an overall strategy for training for the construction industry in Northern Ireland.

- We recommend that CITB (NI) in its role as a partner in ConstructionSkills consider initiating the development of a co-ordinated strategy for training within the industry, covering all levels from apprenticeship training through to management training.

4.24 It is clear from the research that attitudes to training among employers are not all positive. There is a need to demonstrate more clearly the benefits of training to employers. There is also an opportunity to view training as an investment in individuals rather than a necessary cost.

- We recommend that CITB (NI), in association with its stakeholders, should develop a communications strategy designed to improve employer attitudes to training. This could be based on practical case studies demonstrating the benefits to the firm of investing in training.

4.25 There is a strong view within the industry that the current training provision should have a greater balance of practical construction skills training as well as general training in areas such as basic literacy and numeracy.

- We recommend that CITB (NI) should review with training providers the content of existing training provision to ensure that it meets the needs of the industry.

4.26 There are two important minority groups within the industry – female employees and migrant workers; it is therefore important that training is also tailored to meet the needs of these groups.

- We recommend that CITB (NI) and its stakeholders should consider how existing training provision can be better tailored to meet the needs of females and migrant workers within the industry.

4.27 Finally, this research provides a benchmark against which subsequent progress can be measured.

- We recommend that this survey should be repeated in 2-3 years time to investigate what changes have taken place throughout the industry.

4.28 CITB (NI) is currently involved in a range of activities which address a number of the recommendations highlighted above. Further information on these areas of work can be obtained from CITB (NI).

# Appendix A: References

Title: The Northern Ireland Skills Monitoring Survey 2002.  
Author: Skills Unit, Research & Evaluation Branch, Department for Employment & Learning (Based on results of a Survey carried out by the Central Survey Unit, NISRA, during May and June 2002).  
Date Published: June 2003

Title: Employers' Skills Needs Survey.  
Author: CITB–ConstructionSkills.  
Date Published: Autumn 2004

Title: Employer Attitudes and Motivations to Learning and Training (UK).  
Author: IFF Research Ltd prepared on behalf of ConstructionSkills.  
Date Published: April 2005

Title: National Skills Bulletin 2005.  
Author: Skills and Labour Market Research Unit (SLMRU) in FAS for the Expert Group on Future Skills Needs.  
Date Published: September 2005

Title: Sector Skills Agreement Draft: Stages 1-3 for the Construction Industry in Northern Ireland (Version 2).  
Author: ConstructionSkills.  
Date Published: November 2005

Title: Employer Attitudes and Motivations to Learning and Training (Northern Ireland).  
Author: IFF Research Ltd prepared on behalf of CITB–ConstructionSkills.  
Date Published: March 2006

Title: Northern Ireland Employment Survey Supplement.  
Author: Department of Enterprise, Trade and Investment (NI).  
Date Published: March 2006

Title: Northern Ireland Labour Market Intelligence 2006.  
Author: Construction Skills Network.  
Date Published: May 2006

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