



Construction Employers Needs and Perceptions Analysis

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1. Progress South Central

1.1 Progress South Central is the Lifelong Learning Network for Berkshire, Buckinghamshire, Oxfordshire and Surrey, and is funded from December 2007 until November 2010. The partnership consists of the Universities of Reading and Surrey, Oxford Brookes University and Bucks New University and all of their partner colleges, and is hosted by the University of Reading. The objectives of the Network are as follows:

- Address those barriers to progression from vocational further education into and within higher education that might be removed by a better understanding of, and greater responsiveness to, the needs of learners and employers, and improved communication and co-operation between institutions in the region;
- Support institutions in the region to design and deliver provision which meets the needs of both learners and employers in the context of lifelong learning, through the sharing of effective and innovative practice, the brokering of relationships with regional partners, and the provision of opportunities for development.

2. Background

2.1 As part of the Transition Phase of the Progress South Central Lifelong Learning Network (LLN), this research was undertaken in order to establish a baseline of information on the needs of employers and their perceptions of certain education issues and initiatives.

2.2 The areas covered are Apprenticeships; formal qualifications and On Site Assessment and Training (OSAT), perceptions of NVQs, the 14-19 Diploma and Foundation Degrees, and finally Continuing Professional Development (CPD) and the importance of professional bodies.

2.3 It was initially intended that both major contractors and small organisations were included in the survey. Contributions from the former came through either face to face interviews or an email questionnaire, and the following organisations responded:

Carillion
Costain
Cyril Sweett
HBG
Kier Group
Willmott Dixon.

The questionnaire was sent to 14 SMEs by post, along with an overview of the LLN and its objectives, but none responded.

2.4 Given their national perspective, and their close collaboration with employers, the outcomes of discussion with Foundation Degree Forward and ConstructionSkills have also been included in this report. These bodies were also consulted in the formulation of the initial research proposal, along with other organisations including the South East Centre for the Built Environment (SECBE) and the findings are co-terminus with the priorities of other national and regional bodies including the South East England Development Agency (SEEDA) and the Higher Education Funding Council for England (HEFCE).

2.5 Finally, the section on Apprenticeships in this report should be read in conjunction with Dr Karen Cheeseman's report *Construction Apprentices: Barriers to engaging with Higher Education*, which was commissioned by Progress South Central during its' Development Phase. The recommendations from Dr Cheeseman's report can be summarised as follows:

- Publish and raise awareness of progression routes with the construction and built environment.
- Make a Level 4 qualification part of the progression route from Level 3 craft and promote it.
- Level 4 qualifications to be practical, site-based, hands on qualifications delivered on a day-release basis aimed at site, project and general management staff and those wishing to become self-employed.

3. Regional Picture

3.1 In 2005, the total number of people employed in the construction industry in the South East was 327,650, and this figure is expected to rise by 17% by 2011. This means that the industry in the region requires 13,560 new entrants per year in order to meet this requirement.

Of this 13,560, the Wood and Interior Fit Out group has the highest requirement at 1840 per year, with the second highest demand coming from the Professional and Technical staff at 1770. This will result in a 25% increase in the total number employed in the latter category.

3.2 In terms of construction related programmes offered in the Progress South Central region, the following table shows a summary of the provision available:

Course Type	Number Offered
First Diploma	3
Level 2 Plumbing	4
Level 2 Apprenticeship Plumbing	2
Level 2 Electrical	6
Level 2 Apprenticeship Bricklaying	2
NVQ2 Brickwork	2
Level 2 Apprenticeship Painting & Decorating	2
NVQ2 Painting & Decorating	2
NVQ 2 Wood Occupations	3
Level 2 Apprenticeship: Wood Occupations: Sitework	2
Level 2 Apprenticeship: Wood Occupations: Benchwork	2
NVQ2 Trowel Occupations	3
ICA	11
Level 3 Plumbing	4
Level 3 Electrical	2
NVQ3 Brickwork	2
Advanced Apprenticeship Painting and Decorating	2
NVQ3 Painting & Decorating	2
NVQ3 Wood Occupations	3
Advanced Apprenticeship: Wood Occupations: Sitework	2
Advanced Apprenticeship: Wood Occupations: Benchwork	2
ACA	5
BTEC ND Construction	1
CIOB Site Management Certificate	2
CIOB Site Management Diploma	2

BTEC HNC Construction	2
BTEC HND Construction	1
Honours Degree: Construction or Surveying disciplines	8
Honours Degree: Architecture	1
B/MEng	1

There are also a number of trade-specific courses available, such as the EMTA Level 2 Certificate for Domestic Electrical Installers (Part P), which ensures compliance with the Building Regulations.

In total, there are 44 programmes available at Level 2, 27 at Level 3 and 14 at Level 4 and above. Of these 15, 9 are at Level 6 and above.

3.3 Geographically, the level of provision as a whole is spread as follows:

- Berkshire: 8%
- Buckinghamshire: 23%
- Oxfordshire: 40%
- Surrey: 29%

By far the largest providers of construction-related programmes are OCVC with 36% and Guildford College, who deliver 28.5% of the total provision in the Progress South Central region with at least one programme being delivered at levels 2-6.

4. Analysis

4.1 Formal Qualifications and On Site Assessment and Training

4.1.1 All of the organisations surveyed stated that on site training and experience of the workplace was equally as important as formal qualifications, with the exact balance dependent on the role in question. The reason for this is that a combination of academic qualification and work based training provides a balance of academic ability and occupational competence.

4.1.2 However, many management based organisations such as Cyril Sweett still maintain a first degree as a minimum requirement, but at the same time, continue to stress that current degrees do not provide the soft skills or knowledge of the construction workplace required by employers.

As a result of this one employer, whilst supporting their staff in the achievement of level 4 qualifications, confirmed preference for the part time degree route, rather than HNC/D, as this guaranteed the appropriate balance of vocational and academic ability.

4.1.3 Finally, one major contractor confirmed that interest vocational qualifications and work based learning is now increasing, and that more of these types of programme are being supported. This is partly due to the requirements of the ConstructionSkills Certification Scheme (CSCS), which relies solely on occupational competence, and the need for practical, rather than purely academic, management skills.

4.2 Apprenticeships

4.2.1 In this particular research, all of the employers attested to the value of Apprenticeships for the industry in general, but acknowledged that there a number of issues and barriers associated with both the scheme itself and progression from it.

4.2.2 In terms of employment, the majority of major contractors surveyed (66%) employ very few Apprentices each year (approximately 20-30 as a national average), with the combined total in the Progress South Central region being less than 5 individuals. For the reasons stated above, management-based firms employ no Apprentices at all.

This is primarily due to the fact that the major contractors have a low direct labour force, with the vast majority of the work appropriate for Apprentices being undertaken by sub-contractors. Therefore, the annual recruitment need to these positions is also low.

4.2.3 Secondly, it is impossible to consider the position of Apprentices in the built environment industry without taking the financial implications into account. While the ConstructionSkills grant scheme is of obvious

benefit to both the individual and the employer in that it provides funding to support workforce development, the associated paperwork connected to the Apprenticeship grant in particular is considered time consuming, and anecdotal evidence suggests that a second employee is required to manage the process as well as the Apprentice themselves. Many smaller employers are also unaware of the grant scheme itself, and therefore are lacking in understanding of the potential benefits to their company. In terms of the actual employment of an Apprentice, they are also put off by the perceived cost in terms of the individual's supervisory needs.

4.2.4 In addition, Programme-led Apprenticeships have been generally accepted across the industry, although there are some minor concerns over adoption by the supply chain as a whole, as well as over continuity of funding.

4.2.5 Finally, although the position regarding Apprentices described above is the norm, it is also important to consider Carillion Training. Carillion is a major employer which supports over 800 Apprentices through its national network of training centres, the nearest centre of which to Progress South Central is based near Heathrow airport. The Apprentices are nominally employed and trained by Carillion, although in reality they work for one of the organisation's sub-contractors. Upon completion of their training, Carillion's support for the Apprentice then ends, unless their employment with them manage to secure full time employment with the organisation. The majority, however, remain with the sub-contractor.

4.3 NVQs

4.3.1 When considering NVQs, the vast majority (66%) accepts them as the qualification, providing "a means to an end", in the sense that it is the only real way to the attainment of a CSCS card, without which many companies will not allow workers on site. While there are other schemes for electricians and plumbers, CSCS is becoming the industry standard.

4.3.2 NVQs are also used as a means of progression for the non-academic, as well as being widely considered a good competency based assessment tool, including as part of the membership application process for a number of professional bodies.

4.4 14-19 Diploma

4.4.1 For the 14-19 Diploma, the reaction of employers is very different to their continued faith in the NVQ system, in the sense that they exercise a great deal more reservation.

4.4.2 In the first instance, they acknowledge the fact that the Diplomas will encourage interest in a career in the construction industry from a

younger age, and that this, in itself, is a positive thing. However, there are also a number of key concerns.

4.4.3 One of the greatest sources of apprehension comes from a lack of information. One employer stated that, while employers had been consulted in the development of the Diplomas, the results of the consultation had been ignored, as the Diplomas had already become government policy. This particular employer had invested a lot of time into the development of the GCSE in Construction and the Built Environment, and felt that the GCSE would be a much better choice as it would have been easier for employers and individuals to understand the qualification and its value, and the progression routes and opportunities leading from it. In addition to this, there has been little guidance provided to the employers in terms of their role within both the development and delivery of this particular qualification.

The apparent lack of communication has also led to number of other concerns:

4.4.4 Firstly, the nature of the construction industry makes it difficult for the major contractors to commit to any particular consortia on a long term basis, as once a project is completed, the site is closed, and another opened in a different locality. As a result of this, several employers suggested that a national network of employers was required.

4.4.5 Another major concern is the provision of the prescribed 10 days' work experience. Aside from the obvious Health and Safety issues, and the requirements for all site operatives to have taken and passed the appropriate Health and Safety test, it is also unlikely that the students will, by that point, have the skills to work on site to the required standard, and will require a huge amount of supervision. This, in itself, has both financial and time implications. Therefore, the quality of the 'work experience' particularly at the lower levels must be called into question. One organisation suggested that, instead, students could undertake a small, community-based project, such as the restoration of a garden at a nursing home, which could then be supervised by the organisation's employees.

4.4.6 Concern was also expressed over the standard of teaching itself, with anecdotal evidence suggesting that, as an example, art teachers were being asked to teach CAD for the built environment, without the appropriate level of qualification or experience.

4.4.7 Finally, a number of those questioned raised the issue of the ongoing need to convince parents of the validity of the qualifications. As parents of potential Diploma students, two respondents stated that while they would support their children in a career in the construction industry, they would not recommend the Diploma as a qualification route as its' success is unproven and there is not enough information available to encourage an albeit calculated risk.

4.5 Foundation Degrees

4.5.1 Employers were also cautious in their support for Foundation Degrees. The work-based learning element was widely acknowledged as a positive thing, particularly in ensuring that graduates complete the FD with a greater knowledge of the construction industry and its' culture, but in the same way as the 14-19 Diplomas, concern was expressed over the lack of information provided thus far. However, in this case, the information needed is centred on the content and delivery models of Foundation Degrees along with what the progression opportunities are.

4.5.2 Another area worthy of inclusion when considering such qualifications is the importance of choosing an appropriate delivery partner. In the case of Foundation Degrees for the construction industry, research shows that the major contractors are strongly biased towards universities, not FE colleges, and maintain that the universities must have a strong construction history. In the case of Progress South Central, the providers who satisfy these requirements are Oxford Brookes University and the University of Reading, and to a certain extent, the University of Surrey, which has a Civil Engineering focus.

4.5.3 It must also be noted at this point that Oxford Brookes University has developed a Foundation Degree in Construction Management in conjunction with one major employer, for which the first intake is in January 2008. The intention is then to roll out the programme to include employees from other organisations within the construction and the built environment industry. Oxford Brookes is also in the process of applying for accreditation from a professional body for this programme under its' Accredited Centre Status.

4.6 Continuing Professional Development (CPD)

4.6.1 One thing acknowledged by all of the major contractors is the importance of both CPD and membership of the appropriate professional body. The latter is seen as the industry standard, and having a high number of professionally qualified employees is seen as a mark of quality.

4.6.2 All of those questioned also encourage all of their staff in the maintenance of CPD, and for those who are members of a professional body, this is a requirement of membership. The type of activity involved is dependant on the individual's role, but the larger companies generally operate an open policy, providing that the activity is of proven benefit to the business. Many of the organisations also offer financial incentives connected to professional membership, and often pay the membership fees for their staff.

The difficulty with CPD, however, lies in both finding the time to undertake the appropriate training or activity, and also in recording it.

5. Conclusions and Recommendations

5.1 In conclusion, this report highlights a number of key issues which Progress South Central should focus on between the publication of this report and the culmination of the Lifelong Learning Network in November 2010:

- Communication
 - raising awareness and understanding of progression routes within the Progress South Central region
 - raising awareness and understanding of the different qualifications and what can be expected from graduates of these qualifications
- Research and promotion of findings
 - The types and availability of provision in the Progress South Central region
 - Origins and destinations of students on built environment programmes in the Progress South Central region
 - Barriers to regular maintenance of a CPD record and gaps in provision
- Support for the development and embedding of new qualifications
 - Foundation Degrees
 - 14-19 Diplomas

5.2 Further to the outcomes of this research, the following have been identified as recommendations for Progress South Central in their work with the construction and built environment sector.

5.2.1 Development of an action plan to implement the recommendations from Dr Karen Cheeseman's report.

5.2.2 Map showing the different qualifications on offer, how they fit together and their respective values

5.2.3 Series of symposia on a number of different issues including the different qualifications their value, and what can be expected from graduates of each one.

5.2.4 The need for a national network of the larger employers to aid the development of Foundation Degrees should be fed up to the National LLN Construction Forum

5.2.5 Research into the take up of CPD and the most popular types of provision.

The following table shows the actions which are being or will be undertaken in order to implement the recommendations listed above:

Action	Description	Timeline
Development of an action plan to implement the recommendations from Dr Karen Cheeseman's report.		
Publish and raise awareness of progression routes within construction and the built environment	Guidance document for students - To include pathway maps, information on financial support available and professional body membership entry points and a list of contact information for local providers and other useful organisations	First Draft (Content) – 7 th February 2008 Final copy – April 2008
	Guidance document for employers - To include pathway maps, professional body entry points, information on Qualifications and CITB grant information.	First Draft (Content) – 7 th February 2008
	Annual competition for vocational students in the Progress South Central region at level 3, resulting in a week-long course at the National Construction College, designed for them to experience advanced craft and supervisory skills	TBC
Make a level 4 qualification part of the progression route from level 3 craft and promote it	Ensure that appropriate Progression Agreements are in place from level 3 craft programmes to level 4.	Ongoing
	Explore the possibility of research with students regarding where level 4 students come from	TBC

Level 4 qualifications to be practical, site-based, hands on qualifications delivered on a day-release basis aimed at site, project and general management staff and those wishing to become self employed	Offer support to Oxford Brookes University in an evaluation of the Foundation Degree in Construction Management and in the further development of the programme.	
Map showing the different qualifications on offer, how they fit together and their respective values		
Production of a map of the pathways available in the Progress South Central region	2 maps: craft/technical qualifications and supervisory/management qualifications	7 th February 2008
Series of symposia on a number of different issues including the different qualifications their value, and what can be expected from graduates of each one.		
Symposia for Providers	Staff Development: the academic content and assessment processes for each qualification; information on new qualifications (e.g. 14-19 Diplomas). Other topics to be identified.	Summer term 2008
Symposia for Employers	The different qualifications and what they can expect from graduates of each one; Information on grants available; Links to professional bodies	Autumn term 2008
The need for a national network of the larger employers to aid the development of Foundation Degrees should be fed up to the National LLN Construction Forum		
Discussion at National LLN Construction Forum	Development Manager to feed this requirement back to next meeting for discussion by all LLNs.	25 th February 2008
Further Actions TBC	Further Actions TBC	TBC

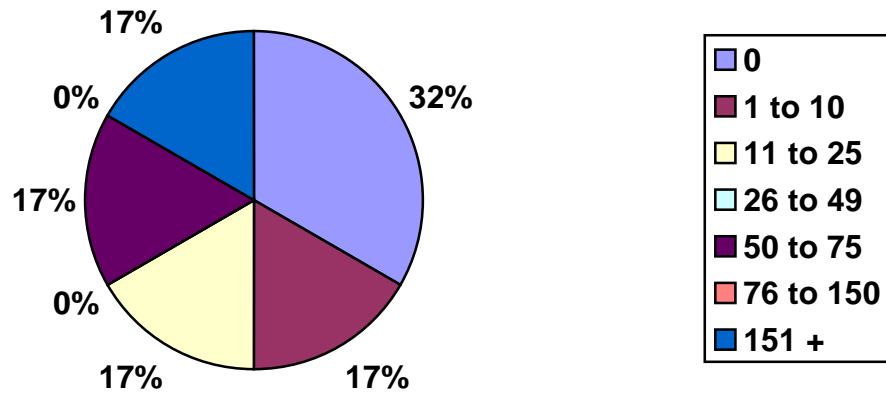
Research into the take up of CPD and the most popular types of provision.		
Commission research	Research to include the level of take up of CPD in industry, and by FE and HE staff; most popular types of provision and areas of interest; and what the barriers are to regular maintenance of a CPD record.	April 2008
CPD Suite	Development of a suite of CPD modules to map against SECBE's ¹ priorities – People, Planet, Performance, Planning, Productivity and Procurement.	January 2009

¹ South East Centre for the Built Environment

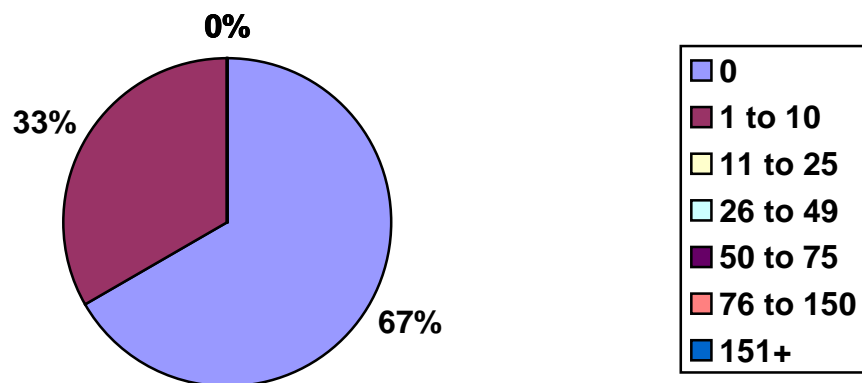
Appendix 1

Apprenticeships

- 1a) How many Apprentices does your organisation take on each year both nationally?

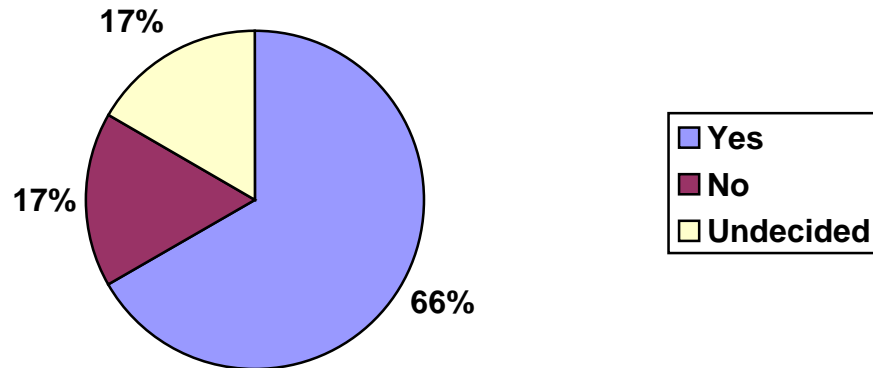


- 1b) How many Apprentices does your organisation take on each year in the Progress South Central region?

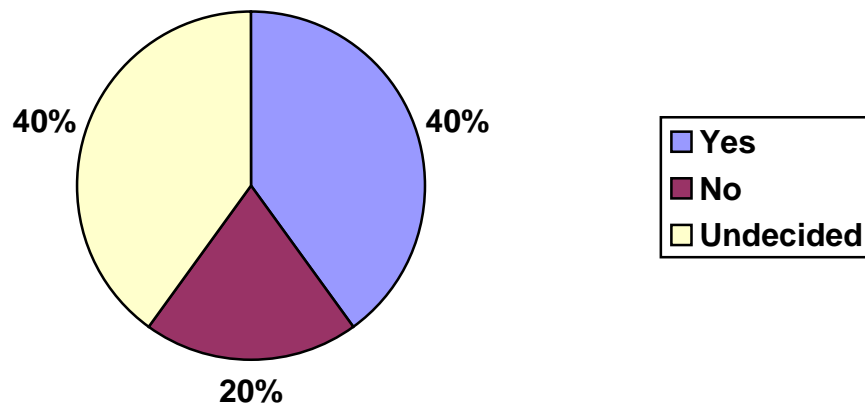


New Qualifications

2) Does your organisation support NVQs?



3) Does your organisation support 14-19 Diplomas?



4) Does your organisation support Foundation Degrees?

