



Visualisation in Archaeology Project: Final Report

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Garry Gibbons
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1 Introduction

1.1 *Executive Summary*

1.1.1 This report presents an overview of research carried out by the Visualisation in Archaeology (VIA) project. Archaeological illustration is a major new research field, with the UK leading this important research movement. The VIA project adopts the position that images are epistemologically significant in that rather than simply communicating ideas, they frame and define ideas and determine particular understandings of the past. Equally, mapping the circumstances of image production provides a practical dimension to the role of images in the archaeology profession. The project's research was undertaken by a team comprising academics and practitioners (Annex M) under the direction of Professor Stephanie Moser, University of Southampton and Garry Gibbons, 3's Company (Consultancy) Limited. Reflecting the importance of this new movement and the UK's leading position, in excess of 230 individuals from six continents made substantial contributions to the project's suite of activities.

1.1.2 This report is directed to English Heritage as project sponsor but will also speak to and inform all key stakeholders in the sector, including:

- English Heritage
- Sector Bodies and Associations
- Awarding Organisations and HEIs
- Training Providers
- Funding Bodies
- Sector Skills Council

1.1.3 Addressing the VIA project's objectives (see 1.3), the priorities and subsequent recommendations contained in this report are built on a robust programme of research carried out across the specialist illustration sector in England. Combined with the outcome of three annual workshops, these results specifically relate to the production and circulation of visual material in

the archaeology and heritage sector toward a coherent and responsive approach to:

- Employer awareness of appropriate training and Continuing Professional Development (CPD) provision which is fit for purpose, responsive to the sector's requirements, and reactive to current and future skills shortages;
- Research-led support for the design and development of qualifications and training that is targeted to increasing visual literacy among practitioners and researchers;
- Inform clear progression routes from qualifications, to entry-level training, and on to formal CPD programmes, ensuring they are relevant and that opportunities for progression into further learning are signposted at all stages;
- Formulate National Occupational Standards relevant to the specialist illustration and graphics work arena in order to underpin the development of qualifications and training;
- Identify non-specialist staff producing visual materials, ensure appropriate levels of training and CPD are available, and encourage entry into the appropriate representative body to ensure maintenance of skills;
- Build a unified statement of principles and guidelines relating to the ethical production of visual material;
- Initiate a sector-wide review of future publication and dissemination trends, which explicitly includes the huge potential of visual and graphics materials as key components in conveying complex data sets, utilising ubiquitous and future digital forms of transmission;
- Establish a Centre of Excellence comprising representatives of all key stakeholders to co-ordinate future programmes of research, monitor and evaluate the delivery and outcomes of this report's recommendations and to specifically dissolve barriers between academics and practitioners.

1.1.4 The VIA project's methods are detailed in Annexes B-F. Both the VIA annual workshops and VIA conference contributed to establishing a high quality network of practitioners and researchers. In many ways these events have redefined the boundaries of visuality-related research and highlighted commonalities of visual issues from disciplines across the humanities, sciences and the arts. The project's virtual resources have showcased research work grappling with the historic development, contemporary practice, and future directions of visualising the results of archaeological investigations. An extensive cross-disciplinary bibliography of publications featuring visuality-related matters indicate the emergence of this field of research over the past thirty years. Extensive and targeted sector intelligence provides an in-depth audit of the specialist illustration sector's extent, skills-base and output.

1.1.5 The VIA project's research activities were undertaken between December 2007 and April 2011 and designed, where appropriate, to complement previous work (Annex G) undertaken over the past decade or so.

1.1.6 This report presents an overview of themes explored across the three annual VIA Workshops alongside evidential support from the project's survey work (Section 2). It then goes on to provide a detailed analysis of specialist illustrators employed in the archaeology sector, the circumstances of their employment, their qualifications, and the training/continuing professional development (CPD) they currently undertake (Sections 3-5). In order to set current CPD provision in context, Annex H provides a review of CPD development in the archaeology sector over the past 30 years. Profile summaries of specialist illustrators and senior illustration staff are presented in Annexes I & J. A summary profile of non-specialist illustrators working across the sector is provided in Annex K.

1.1.7 The report's conclusions and a series of recommendations are presented (Section 6) and are summarised below.

1.1.8 A glossary of terms is provided in Annex L.

1.2 **Background**

1.2.1 Traditionally, archaeological illustration has provided a two-dimensional form of data recording within the archaeological process. Whether contributing at the primary/secondary level of a project's archive, or as the visual representation of data at publication, the language of archaeological illustration has persisted in a broadly recognisable form since the nineteenth century.

1.2.2 Recent visual studies within archaeology have focused on the history of pictorial reconstructions of ancient life (Moser, 1998) challenging familiar assumptions about our understanding of humans in the deep past. Attention has also been turned to other themes concerning imagery in archaeology (Molyneaux, 1997; Smiles & Moser, 2005), marking a burgeoning concern with the relationship between visual representations and our perceptions and expectations of the past.

1.2.3 In contrast, representation within science is a topic that has generated a growing body of literature since the mid-1970s, ranging from Rudwick's (1976) seminal work on the emergence of a visual language in geology, to an expansive area of study investigating visual representations as 'scientific' resources (Lynch & Woolgar, 1990; Baigrie, 1996). Within science, the epistemological nature of scientific illustration has shifted from being taken-for-granted and unproblematic, to a fruitful area of study from which numerous critical issues have been identified.

1.2.4 How the past is 'thought' within the archaeological profession has been widely studied and documented, providing a critical analysis of the development of archaeological theory and resulting shifts of intellectual engagement between archaeologists and material culture. Whilst fundamental paradigm shifts have been described and acknowledged within archaeology,

the practice of visually representing archaeological data continues as a familiar and comfortable enterprise.

1.3 **Project Outcomes**

1.3.1 These objectives are designed to effectively produce a meaningful, practical dimension to the results of the project's applied research, thereby promoting a direct and tangible link between the professional and academic constituencies within archaeology, the results of which will delineate practical guidelines and inform professional standards through a broad understanding of the historic development and deployment of archaeological illustration.

- substantially contribute towards the construction of an intellectual framework for the visualisation of archaeological data based on applied research;
- to promote conceptual reflection within archaeology and to encourage dialogue between disciplines;
- increase the knowledge base of English Heritage by promoting departmental and cross-departmental dialogue, strategic thinking and policy-making in the areas of:
 - alternative models of publication;
 - implications of developing technologies on dissemination;
 - development of future professional and academic (re)training programmes;
- a strategic report, designed to communicate the significant results of the project to a professional audience composed of practitioners and policy makers, primarily within English Heritage;
- dissemination of the project's findings in the form of summaries, reports, forward planning documents and recommendations in hard copy form and via the project's web site. Also, the periodic attendance at seminars and conferences by the project's principals to present thematic results of the project's work.

1.4 **Project Activities**

1.4.1 **Conferences**

- G Gibbons. April 2012. *A Visual Exposé: the 'How', the 'Why', and the 'Who' of Archaeological Illustration*. (Institute for Archaeologists Conference, Oxford, UK)
- G Gibbons & R Read. September 2010. *Visualising Archaeology: Towards a European Perspective on Skills Requirements and Provision: Roundtable*. (European Association of Archaeologists Conference, The Hague, The Netherlands)

- G Gibbons. September 2009. *VIA: Building Bridges Between Practice and Theory*. (Association of Archaeological Illustrators & Surveyors Conference, Bristol, UK)
- G Gibbons. June 2009. *Visualisation in Archaeology: Between Practice and Theory*. (Arqueológica 2.0 Conference, Seville, Spain)
- G Gibbons. April 2009. *VIA: Building Bridges Between Practice and Theory*. (Institute for Archaeologists Conference, Torquay, UK)
- S Moser (2011) *Visual Strategies for Presenting Archaeological Worlds* (Presented at 'National Museums and National Identity', Netherlands Institute for Advanced Studies in the Humanities and Social Sciences)
- S E Perry (December 2010) *Visualisation in Archaeology*. (32nd Annual Meeting of the Theoretical Archaeology Group, Bristol, UK)
- S Smiles. September 2009. *Discursive Modes in the Antiquarian Image*. (Visualising Antiquarianism in Ireland, UCD Humanities/Institute of Ireland, University College Dublin, Dublin)
- S Smiles. December 2008. *Primitive Patriots? The Construction of the Ancient Briton in Early Modern Text and Image*. ('Working with Barbarians' session, TAG 2008, University of Southampton)

1.4.2 **Publications**

- Gibbons, G. 2011. *2010 VIA Snapshot Survey: Summary Results*. www.viarch.org.uk/content/2010-media.asp (accessed 6 January 2012)
- Moser, S. 2011. Archaeological visualisation: early artefact illustration and the birth of the archaeological image. In I. Hodder (ed.) *Archaeological Theory Today*. Cambridge: Polity Press. pp.292-322
- Moser, S. in press. Making expert knowledge through the image: connections between antiquarian and early modern scientific illustration. *Isis. Journal for the History of Science*.
- Perry, S. E. 2009. *2008 VIA Workshop Report: Visualisation and Knowledge Formation in Archaeology: Comments on the First VIA Workshop* www.viarch.org.uk/content/2010-media.asp (accessed 6 January 2012)
- Perry, S. E. 2010. *2009 VIA Workshop Report: Visualisation in Context: An Interplay of Practice and Theory: Reflections on the Second VIA Workshop*

www.viarch.org.uk/content/2010-media.asp (accessed 6 January 2012)

- Perry, S. E. 2011. *2010 VIA Workshop Report: Creation, Communication, Circulation, Consumption: Reflections on the Third VIA Workshop*
www.viarch.org.uk/content/2010-media.asp (accessed 6 January 2012)
- Smiles, S. Forthcoming 2012. Imaging British history -- patriotism, professional arts practice and the quest for precision, in Sheila Bonde and Stephen Houston (eds) *Representing the Past: Archaeology through Image & Text*, Providence: Joukowsky Institute, Brown University.

1.4.3 **Multimedia**

- Bonde, S. & C. Maines. 2008. *Monks, Time and Landscape: Visualizing Change in Monastic Archaeology*. (2008 VIA Workshop Presentation)
- Dobie, J. 2008. *A Matter of Style: The Development of Conventions in Archaeological Illustration*. (2008 VIA Workshop Presentation)
- Pearson, T. 2008. *The Richest Historical Record we Possess: Challenges in Representing Archaeological Landscapes*. (2008 VIA Workshop Presentation)

1.4.4 **Publication of the VIA project's results are subject to a separate funding application as detailed in the VIA Project Design (MAIN5172). See Recommendation 13.**

1.5 **The Report's Recommendations**

1.5.1 **Professional Standards**

Recommendation 1

English Heritage working with all related stakeholders initiate a process to map the roles and skills of those undertaking imaging and graphics duties within the archaeology and heritage sector, toward the development of occupational standards for specialist and non-specialist image producers.

Recommendation 2

English Heritage working with all related stakeholders develop a declaration of ethical principles and guidelines for imaging and graphics professionals working in the archaeology and heritage sector.

1.5.2 **Specialist Sector Intelligence**

Recommendation 3

English Heritage working with all related stakeholders extend the VIA Snapshot Survey to include all employed and self-employed imaging and

graphics professionals operating in the archaeology and heritage sector across the UK. Repeat survey every five years.

Recommendation 4

English Heritage working with all related stakeholders to plan a series of workshops bringing together senior imaging professionals to explore key themes and issues facing the specialist sector, meeting foresight and sector intelligence themes of the National Heritage Protection Plan.

1.5.3 Entry-level Training

Recommendation 5

English Heritage working with Standing Committee for Archaeology and the Higher Education Funding Councils along with all related stakeholders work towards reviewing the QAA subject benchmark statement for archaeology to highlight the necessity for adequate training in visual literacy.

Recommendation 6

English Heritage working with all related stakeholders establish partnerships to jointly develop inter-organisational mechanisms for the strategic delivery of knowledge and skills transfer relating to the production of visual materials appropriate to entry-level staff.

1.5.5 Continuing Professional Development

Recommendation 7

IfA Graphic Archaeology Group working in partnership with related stakeholders actively promote the IfA's CPD scheme as a model of best practice to all individuals and organisations operating in the specialist sector and to non-specialists producing visual materials. This recommendation acknowledges Recommendation 21 and 29 of the Southport Report.

Recommendation 8

English Heritage working with all related stakeholders undertake a detailed audit of CPD and training provision among specialist illustrators.

Recommendation 9

IfA Graphic Archaeology Group actively lobby to ensure that organisations enjoying RO status are providing appropriate support for the provision of CPD and training among specialist illustration staff.

1.5.4 Non-specialist Illustrators

Recommendation 10

Building on the work currently undertaken by the VIA project, the IfA Graphic Archaeology Group to identify and survey non-specialist illustrators.

1.5.5 Other Recommendations

Recommendation 11

English Heritage working in partnership with all related stakeholders commission an integrated review of publication and dissemination practice across the heritage sector and in comparable professions. To horizon scan dissemination methods and technologies, identifying likely key drivers and conditions of change in publication policy. This recommendation builds on Recommendation 17 of the Southport Report.

Recommendation 12

English Heritage working in partnership with the VIA project management team and all related stakeholders establish a Centre of Excellence dedicated to promoting new research, standards and best practice. To appoint a steering committee representing key stakeholders from across the archaeology profession and comparable professions. To strategically implement this report's recommendations and to define future research. To use the VIA project's online resources as a basis of a Centre of Excellence website to disseminate results of its work.

Recommendation 13

English Heritage to implement Section 4: Post-project Publication, VIA Project Design (MAIN5172) – funding for publication of the VIA project's activities.

1.6 **Acknowledgements**

This report is the final act of the Visualisation in Archaeology project and, as such, has been substantially shaped by the project team of Professor Stephanie Moser (Project Co-director), Dr Simon James, Professor Sam Smiles, Robert Read, Steven Cheshire and Dr Sara Perry. Our sincere thanks must also be extended to all those who contributed to the project's activities but are too numerous to mention. Peter Hinton, IfA Chief Executive and Steve Allen, IfA Graphic Archaeology Group, both provided insightful and encouraging feedback to early drafts of the report. The project would not have been possible without the generous financial support of English Heritage nor without the patience and understanding of Barney Sloane, Bernard Thomason, Trevor Pearson, Tim Cromack and Sarah May. Finally, all errors and omissions remain entirely my own.

2 Thematic Overview

2.1 *Introduction*

2.1.1 Images are such an accepted – in many ways, taken-for-granted -- part of an archaeologist's academic and professional life that the prospect of questioning and analysing them appears an unnecessary, even, indulgent, exercise open only to a small cabal of detached academics; by and large, images are left alone to fulfill their function. After all, they are straightforward products arising from the core work of archaeology: they have been expertly executed; they are objective and complete; and they passively await the professional gaze.

2.1.2 To complement and in many ways to challenge these developments, the VIA project has provided a focus for academics and practitioners with an active interest in the history, deployment and role of images in archaeology. In excess of 230 individuals have substantially contributed to the project's series of activities -- conference, annual workshops, online resources and surveys (Annexes B-F). The VIA has fashioned a space in which an open exchange of ideas and opinions has led to the delineation and elaboration of questions intended to unsettle the seemingly natural state of equilibrium which frames and confines images.

2.1.3 The following themes have emerged from discussion and debate within the three annual VIA workshops and are held to be of particular relevance to the profession and to specialist illustrators. The themes are complemented with data gathered from the VIA project's surveys (Annex F), providing evidential support and qualifying statements for this report's recommendations.

2.2 *Creating Specialist Illustrators*

2.2.1 For at least the past 20 years, archaeology has increasingly striven towards a fully professional status for the benefit of all those engaged in the heritage sector – organisations, practitioners and clients. A necessary component of professionalisation has been an acknowledgement that archaeology no longer defines itself in-the-field but is rather a process comprising a vast array of distinct roles and activities, evident in the recent renaming of the UK's regulatory body from an institute which attends to 'dirt archaeology' (Institute of Field Archaeologists -- IFA) to one which explicitly represents the interests of all archaeology (Institute for Archaeology -- IfA); although the name change evolved out of a decade of internal debate (Davies 2003).

2.2.2 Research has been undertaken to codify the breadth of professional activities across the sector. Carter & Robertson (2002) isolated nineteen core activity areas which collectively formed a basis for the archaeology National Occupational Standards (NOS). Either side of the NOS occupational mapping exercise, two related but temporally distinct projects (Aitchison 2000; 2011) identified up to eleven separate 'secondary' areas of archaeological activity encompassing in excess of eighty specialisms, these activities fell outside the sector's 'primary' roles of project management and invasive fieldwork.

Specialist Illustrators typically charge less for their services than the average figure for all specialists, and are on average older than other specialists (and have been practising for longer) . . . They find getting access to CPD training to be particularly difficult.

Aitchison 2011:45

The illustrator . . . has recently been elected, again by peers in the society, to the higher level of Fellow (FSIA) for consistently high standards and fostering standards in the profession generally. He is also an elected Fellow of the Society of Antiquaries (FSA), a reflection of the expertise brought to bear through many years of on-the-job training and experience.

VIA 2010 Snapshot Survey, Feedback

A department which previously employed five archaeological illustrators is now reduced to one person, who is expected to do everything from artefact illustration to web design, as well as lots of odd jobs which have no connection to archaeological illustration.

VIA 2010 Snapshot Survey, Feedback

2.2.3 Today, the concept of 'specialist illustrator' has largely developed out of a process of sector-wide professionalisation whereby occupational mapping serves to ring-fence broad areas of activities and codify the skill-sets required to undertake them. What is at stake in this push for the professionalisation of the industry is a mechanism available for specialist illustrators to assert their professional status. NOS are explicitly designed to collate and measure the skills and competencies necessary to fulfill the role of professional illustrator; however organisations employing specialist illustrators -- with but one exception -- state that neither IfA guidelines nor NOS play a role when recruiting specialist illustrators.

2.2.4 Organisations not only fail to utilise the profession's NOS to structure recruitment policy within the graphics arena, but neither do they require specialist illustrators to exhibit professional status through the mechanism of IfA membership -- almost two-thirds of organisations state that an illustrator's affiliation to a professional body is not a factor at recruitment.

2.2.5 In turn, the specialist illustration community reflects those expectations with little more than one-in-five employed specialist illustrators opting for IfA membership. As the majority of illustrators fall outside the IfA's regulatory sphere of influence there is little evidence of a coherent system to formally measure and demonstrate an illustrator's range and depth of competencies.

2.2.6 *National Occupational Standards for archaeology as they are currently structured are acknowledged as failing their intended function; little is known of them and their utility is largely unrecognised across the sector (Aitchison 2008: 31). NOS dedicated to illustration and graphics will provide a viable and meaningful alternative for the specialist sector. The VIA project has undertaken an audit of specialist illustrators employed in England recording the work they undertake, the technologies employed to carry out that work, and other graphics duties for which they are responsible. This data is an ideal foundation on which to develop occupational standards targeted to specialist and non-specialist illustration and graphics staff. See Recommendation 1.*

2.2.7 In the past the AAI&S had played an important role in setting standards for illustrators and surveyors but following their recent merger with the IfA, and their new incarnation as the Graphic Archaeology Group (GAG), this new body is now ideally placed to raise and lobby for illustrator-specific issues within the sector's regulatory body.

2.2.8 Historically the AAI&S had also encountered low membership rates, attracting just under one in three employed specialist illustrators to its ranks, so the expectation for a surge in IfA membership from the specialist illustration fraternity may be overly optimistic. While illustrators and individuals with related interests are offered direct membership to GAG, the challenge will be to raise the profile of specialist illustrators within the representative body, and thereby, access its CPD mechanism by encouraging full IfA practitioner membership.

2.2.9 Traditionally, organisations and clients judge a practitioner's professional profile through the established method of portfolio-based interview. Here, ability is established primarily through an illustrator's output (a collection of images) while the demonstrable evidence of an illustrator's

development towards her/his professional status (the maintenance of knowledge and skills required to deliver a service) is largely passed by.

2.2.10 The VIA project has compiled a list of all employed specialist illustrators and their employers in England. More recently the VIA has, in association with the former AAI&S, started the process of identifying freelance illustrators. It is essential for this work to continue, building a database of specialist illustrators operating across the UK. First steps in this exercise will be to identify who the specialists are, where they are, and what they do. See Recommendation 3.

2.3 Qualifying Specialist Illustrators

In the 'old' days there weren't the same courses available – you studied archaeology and did an illustration course.

VIA 2010 Snapshot Survey, Feedback

Regular updates and changes in technology and the capabilities of said technology mean that we continuously relearn or adjust our methods of illustration. Usually assessing, trialing and then assimilating the best bits.

VIA Snapshot Survey, Feedback

2.3.1 Specialist illustrators typically enter the sector as graduates having undertaken an archaeology-based undergraduate course yet few of those courses offer illustration modules and those modules that are available are undertaken on a voluntary basis (UCAS list over 220 archaeology degree courses in England, an online search of HEIs reveal that archaeological illustration modules are promoted on just nine degree courses delivered at two institutions). Consequently, an illustrator's pathway into the profession appears to meet an expectation that specialist illustrators should have prior archaeological experience to effectively carry out their role but there is little opportunity to attune graduates to the visual demands of the profession.

2.3.2 Five entry-level employed specialist illustrators working in England with less than two years' experience have been identified by the VIA project (Table 4.4). Three are graduates, one a post-graduate, and one with qualifications gained through further education. They are all employed in small or medium size organisations, indeed the representation of illustrators employed in large organisations with relatively low levels of experience is negligible. Although these entry-level illustrators are in their 20s, relatively low levels of experience are also evident across a large percentage of illustrators in the 20-40 age range.

2.3.3 It is noteworthy that just one of the five entry-level illustrators has a qualification directly relating to their chosen profession, that is, a degree in archaeological illustration. Although this represents 20% of a very small sample, it is a higher rate than found among all employed specialist illustrators where just 9% of illustrators have a degree directly relating to their profession. It is also interesting to note that the range of illustration tasks undertaken by this single illustrator far exceed those of her/his peers.

2.3.4 Mapping the route of entry-level specialist illustrators into the sector will provide core data for the effective development of HEI illustration modules and entry-level CPD/training programmes. See Recommendations 3 and 4.

2.4 Training Specialist Illustrators: Digital Techniques

2.4.1 Training offered to specialist illustrators is generally intended to address the acquisition and maintenance of digital-based skills; indeed, senior illustration staff report that 'technology' has been and will be a major driver of

change in the graphics environment. Technical innovation shapes training provision and deflects available resources to the detriment of traditional skills.

2.4.2 *There is a clear perception among illustration managers that technology has and will be the principal driver of change in the illustration and graphics environment. While technology is pulling us ever forward, is the specialist illustration sector maintaining and building on its traditional skill-sets, or is entry-level training and subsequent upskilling of staff just meeting technological demands? See Recommendations 1, 4 and 8.*

2.4.3 Across different specialisms in the sector there is limited evidence for employers investing in training for their staff (Aitchison 2011), yet the VIA project has found wide-spread access to training among specialist illustrators -- a paradox that may be accounted for when the forms of training provision are analysed. Fewer than 10% of specialist illustrators engage with external training providers, whilst the vast majority of illustrators receive in-house training – a situation reflecting the preference of employers to adopt training methods which place demands on time, rather than money (Creative & Cultural Skills 2011: 92).

2.4.4 *Specialists in general -- and specialist illustrators in particular -- reportedly find it difficult to access ongoing CPD (Aitchison 2011). It is evident that knowledge of the IfA's CPD mechanism is largely unknown among specialist illustrators where training and CPD are conflated as one and the same thing. Whilst the VIA has identified that training is widely available among specialist illustrators, it is seemingly being understood and reported as CPD. The recently formed Graphic Archaeology Group, working with the IfA's professional development officer, is ideally placed to strategically promote CPD and its benefits within the workplace, at conference, and through workshops. See Recommendations 4, 6 and 7.*

2.4.5 Although structured CPD incorporates a diversity of opportunities delivered in a range of environments, the predominance of informal training delivered in-house (Fig 6.4) suggests that training for specialist illustrators is entirely based on employer requirements. Whilst this may align with initiatives of employer-demand-led training (Leitch 2006; UKCES 2010), it highlights a shift away from the student/practitioner toward a clear emphasis on the preferences of employers.

2.4.6 *If the profession is to (explicitly or implicitly) advocate employer-demand-led training, then it is necessary to undertake a detailed audit of the forms of in-house training undertaken by specialist illustrators across the industry to map current employer-led-demand. Similarly, an audit should be undertaken of formal external training provision which would map current employee-led-demand. Together, this work would provide evidence for the real nature and extent of current employer/employee-demand-led training to inform future external training provision, internal training provision, and to feed into illustration- and graphics-focused occupational standards. See Recommendation 8.*

2.4.7 The Leitch Review also placed a strong emphasis on the acquisition of high-level skills gained through HE institutions in preference to vocational

*Despite its critics and its largely peripheral consideration of HE, the **Leitch Review** reshaped the UK's training landscape by an ambitious call for:*

- 1. the establishment of a full demand-led (employer-facing) training system;*
- 2. employers adopting a key role in training provision;*
- 3. a legal entitlement for employees to access training in the workplace by 2010 (a recommendation now postponed for SMEs).*

Most (CPD) aimed at fieldwork only, usually individual plans are not created for specific jobs (ie Finds, Editors, Illustration, Specialists). Usually they are personal plans and goals ... associated with publication aims.

VIA 2010 Snapshot Survey, Feedback

education which, although providing the skills necessary for employees to undertake specific jobs, nevertheless failed to deliver broader analytical skills. For Leitch, universities were intended to act as high-level training providers for employers in order to remedy perceived shortcomings in their in-house training provision (Sastry & Bekhradnia 2007).

2.4.8 For a range of reasons employers are largely sleeping partners in training provision despite encouragement for them to meet their training obligations, especially by contributing to associated training costs, where appropriate (Aitchison 2008: 27). Historic differences between demands of the labour market and HE undergraduate programmes regarding the acquisition of appropriate entry-level skills for graduates have been charted (Aitchison 2004). However, restricted opportunities to contribute in-service work and formal training to postgraduate programmes provide a barrier to practitioners wishing to maintain and develop high-level skills. The consequences of these issues are evident in the higher than average percentage of specialist illustrators with a degree as their highest qualification, and a disproportionately low percentage of specialist illustrators attaining a Master's degree (Fig 5.1).

2.4.9 ***Few, if any, structures exist that allow for progression towards a postgraduate qualification by formally acknowledging the contribution of in-service work and accredited training -- where such training may exist. See Recommendation 6.***

Many of the values of the drawn image are no longer asked for or required as digital technology demands different approaches and attitudes.

VIA 2010 Snapshot Survey, Feedback

2.5 ***Training Specialist Illustrators: Traditional Techniques***

2.5.1 Evidently, specialist illustrators with an archaeology background are technically proficient and display many technical skills, indeed technical know-how is to the fore within an exclusively digital graphics environment.

2.5.2 Although specialist illustrators display an understandable concern with the successful deployment of constantly changing digital technologies -- which, in turn, serves to enhance trust in technology and its output -- concerns are widely expressed over a decline in the maintenance of traditional illustration skills. Drafting skills are central to illustration practice, are intimately entwined with adopting and understanding discipline-specific codes of visual production, and maintain a tangible connection to the discipline's visual history.

2.5.3 Training provides a forum in which conventions are not just articulated, but an arena in which they are constantly evaluated, refined, and circulated throughout the profession. It is through a direct visual relationship with material remains from the past -- that is, attention is placed on an object through an intellectual raking light -- that allows specialist illustrators to substantially contribute to a fuller communication of knowledge and understanding. After all, illustrators hold an object under sustained scrutiny for longer and in more detail than most other practitioners, specifically in order to forefront an artefact's archaeological 'credentials'; how effectively that is done relates directly to a familiarity with the visual codes of image production.

2.5.4 Traditional working practices account for a minority (10%) of day-to-day work and are utilised only in finds drawings and reconstructions. That the production of these two illustration forms are now the main outlet for traditional drafting methods may explain its limited use, but the profile of those

Having worked for the same company for fifteen years it is striking how much has changed in that time. There used to be six full time illustrators with their own specialisms covering maps and plans to artifacts. I now work as a multi-tasker concentrating on grey literature reports, covering artefact illustration as much as possible.

VIA Snapshot Survey, Feedback

undertaking traditional methods may be of some concern; on average illustrators employing traditional methods are 50 years old with an average experience of 18 years, compared to an average age of 42 years and average experience of 14 years for all illustration specialists. In contrast, those illustrators working digitally have an average age of 39 years and average experience of 12 years.

2.5.5 *Indications are that while digital working practices are widely employed by all specialist illustrators, traditional illustration methods are now the exception rather than the rule, and undertaken by employed specialist illustrators at the top end of the average age range for a confined number of illustration tasks. If the profession places value on traditional imaging skills as a tangible link to the establishment of a visual language in archaeology, it must act over the coming years to chart this apparent rate of decline and to ensure the ongoing maintenance of traditional illustration skills. See Recommendations 4 and 9.*

2.5.6 As the production of finds and reconstruction drawings and the skills required to undertake them are mostly restricted to senior illustration staff, it is likely that a significant amount of this specialist work is being outsourced to self-employed illustrators -- indeed, almost three-quarters of work outsourced by organisations through their graphics office, are finds and reconstruction drawings, a figure which is almost certainly higher when work is included that is directly outsourced by staff outside of the graphics office. Employers across the heritage sector often fail to acknowledge their responsibility in the maintenance of specialist skills -- especially those organisations that outsource specialist services -- leading to a sustained decline of in-house expertise (Creative & Cultural Skills 2008: 34).

2.5.7 *It is essential to identify and profile self-employed illustrators across the UK to record their skills and competencies. See Recommendation 3.*

Much of the illustration and design work previously undertaken by archaeological illustrators in this organisation is now either undertaken by non-specialist archaeological field staff, with no illustration training, or is sent out to external non-archaeological designers. The graphics staff has no right to quality control on any of this work.

VIA 2010 Snapshot Survey,
Feedback

2.6 **Non-specialist Illustrators**

2.6.1 A largely hidden pool of illustrators exist in numbers potentially greater than those of specialist illustrators -- just as many organisations employ non-specialist illustrators, as employ specialist illustrators (Annex K). Mainly producing a restricted range of illustration materials, non-specialist illustrators are widely employed across the sector at project officer level, or higher in predominantly small and medium size organisations. These organisations fall into one of two camps: first, those organisations unable to justify employing a specialist illustrator, but having a single member of staff with knowledge of a particular software package and/or with some draughting skills; secondly, organisations whose corporate policy require all members of staff to 'multi-task'. More than two-thirds of organisations employing non-specialist illustrators produce images digitally but, perhaps surprisingly, as many as one in five produce images using only traditional craft skills.

2.6.2 Preliminary investigations revealed that upward of seventy non-specialist illustrators operate in organisations which do not employ specialist illustrators; however, anecdotal evidence strongly suggests those numbers are

substantially higher, since organisations employing specialist illustrators also have non-specialist illustrators working in the wider organisation.

2.6.3 The role of image-maker is not expected to be undertaken by specialist staff at all times – archaeologists are, by nature, doers -- but in order to ensure appropriate standards it would be in the profession's interest to identify non-specialist illustrators to better understand the work they undertake, the methods they employ, and the training provided/required to support their imaging tasks. See Recommendation 10.

2.7 Professional Values

2.7.1 Professionals are ethically bound to adopt a profession's code of conduct in their day-to-day business activities; it is a principal factor in the process of becoming a professionally responsible practitioner and is directly linked to professional standards. Standards of competence are typically enshrined in a statement that defines the range of professional roles and the skill-sets required to effectively carry out those duties -- statements such as National Occupational Standards. Therefore, becoming an ethical professional includes, among other things, acting within the norms and standards of a profession. However, who is responsible when standards are established but not fully endorsed by discrete stakeholders within a profession and, as a consequence, are not understood to be relevant to their specific occupational circumstances?

Subscription to this Code of Conduct for individuals engaged in the study and care of the historic environment assumes acceptance of these responsibilities. Those who subscribe to it and carry out its provisions will thereby be identified as persons professing specific standards of competence, responsibility and ethical behaviour in the pursuit of archaeological work.

IfA Code of Conduct, Revised Edition April 2010

2.7.2 Standards set a benchmark of competence specific to an occupation and, ideally, provide a framework for accredited training and qualifications. They describe what a professional needs to do, know and understand to effectively carry out their work and should describe current best practice. The IfA are currently reviewing existing NOS for archaeology, but as previously outlined, those standards have had little impact on the profession in general or for specialist illustrators in particular.

2.7.3 Minimal buy-in of NOS from the profession suggests there is a strong case for developing occupational standards that are directly relevant to illustration and graphics specialists rather than persist with the current system which is constructed around a set of core functional areas. The development of specialist-specific standards should be advanced through a process of, inter alia, investigating cross-sector commonality of standards, sector intelligence, and stakeholder consultation. See Recommendations 1, 2, 3 and 4.

2.7.4 As an element in the wider process of archaeology, the production of visual material is rarely perceived as the outcome of a distinct professional culture defined by its own identity, norms or standards and is, as a

A real advancement in terms of standards ... but in terms of working practice illustrators still are regularly one or two people within small organisations, isolated around the country.

VIA Workshop

Finally, the book itself is well-made, stoutly bound, lavishly illustrated, and represents very good value for money.

Antiquity 75: 218-9

Little justice has otherwise been done to the site through the volume's production -- some tables are reproduced much too large, there are problems with computer-generated grey-scale and a number of the distribution figures are over-reduced and verge on being intelligible ...

Antiquity 74: 450-2

consequence, thought unworthy of independent scrutiny. An examination of book reviews featured in *Antiquity* over the period 1996-2000 identified thirteen publications relating to UK-based archaeological investigations. Few of those reviews acknowledged the visual content of the publications, instead always relying on the publication's textual content for academic vetting -- those that did concern themselves with visual material addressed issues of poor image preparation leading to inadequate levels of reproduction (the images do not look nice) or acknowledged the contribution of images to a lavish publication (the images do look nice). On no occasion was a publication's visual content critically evaluated according to measures of fidelity, accuracy or probity.

2.7.5 An important general realisation arising from the VIA meetings was that visualisation is widely undervalued in archaeology (and not just in Britain). This is because the ability to critically evaluate visual imagery (e.g. the conventions, assumptions and arguments encoded in many simple diagrams, as well as elaborate reconstruction drawings), obviously vital to practitioners, is rarely discussed and hardly features in general archaeological training in universities. This stands in stark contrast to the emphasis placed on written and verbal skills. The result is widespread underdevelopment of equivalent 'visual competency' in the profession.

2.7.6 Scholarship is established through the written word and systems are in place to monitor and control textual efficacy and as a consequence, images tend to circulate behind the text and are subject to little or no regulatory rigour. Communicating the results of archaeological investigations within the traditional publication model relies on a formal symbiosis between image and text. However the primacy of authorship which prevails across the profession and its direct connection with the written word, invariably casts a shadow over the visual.

2.7.7 *Specialist illustrators produce images that connect directly with the material traces of archaeological investigations and re-present them as scalable objects which are subject to disciplinary study. Produced through a process of mediation and carrying implicit authority claims, visual materials are worthy of critical evaluation. See Recommendation 2.*

2.7.8 Mainstream academics and professionals within archaeology typically regard the production of images as a sub-area within the wider field of archaeology; it is an ancillary activity, undertaken by ancillary staff – a view held not only across the sector but having widespread currency among specialist image producers themselves.

2.7.9 Specialist illustrators make a major material contribution to a report yet are rarely involved in the research and analysis phases of a project, let alone participating in a project's management. In contrast, the production of an image is seldom a solitary activity, it is a team effort -- images destined for publication or digital dissemination are open to multiple levels of control and constraint by the individuals commissioning them, generally in the guise of project director or finds specialist; that is, those controlling authorship.

2.7.10 Images arising from archaeological investigations are an outcome of this social dynamic, but what are the implications of this process in the creation of knowledge and understanding? This question is especially

So, control of outputs and their deployment is often, at least partly, out of the hands of those who are creating visualisations, all of this is a matter of negotiation but often within unfavourable, asymmetric power relations.

VIA 2010 Snapshot Survey,
Feedback

pertinent against claims that archaeologists across the profession display lower levels of visual literacy than did their predecessors.

2.8 **Visual (Re)Orientation**

There is an implicit assumption ... that briefing is a one way process, or that there is a formal brief supplied to the illustrator. This is not necessarily the case. An experienced illustrator will often largely set the brief by 'helping' the client to understand what is wanted.

VIA Snapshot Survey,
Feedback

... recently been struck how we train our students to write and how to speak but we don't actually train them how to use images – we don't give them those basic skills ... what are we doing wrong?

VIA Workshop

There's a major case for making all archaeology students do a basic illustration course, even if they're crap at drawing, so they can start getting an idea of what's involved so that they can interact with professionals better.

VIA Workshop

2.8.1 Archaeologists are required to work with and through images, they are a staple of archaeological practice, yet in order for the profession to fully acknowledge that images register and calibrate traces from the past -- thereby rendering them eligible for study -- archaeologists' eyes must adjust to the shadowy conditions and circumstances of their production.

2.8.2 Project managers and senior archaeologists are responsible for more than half of all illustration briefs provided to specialist illustrators -- briefs which define the terms and conditions of an image's creation. Further, other grades of practitioners (i.e. finds specialists, editors, publication managers, etc) provide almost a third of image briefs. Even so, specialist illustrators commonly report that briefs are often unfit for purpose, an anecdote that may go some way to explaining why almost one in five illustration briefs are generated by illustrators themselves.

2.8.3 ***The development of a visual sensibility is a necessary prerequisite to the practice of archaeology not only for the expert creation of images, but for their expert interpretation at the point of reception -- especially where the notion of producer/audience is intimately entwined. See Recommendation 5.***

2.8.4 Specialist illustrators report that professional archaeologists themselves are the principal audience of the images they commission. In contrast, students and 'the public' appear to be minority consumers of visual materials. What becomes apparent here is that the profession produces images largely for its own edification through a complex cycle of collaborative events ranging across key points of creation, communication, circulation and consumption. Whilst this virtuous cycle seemingly delivers adequate visual results, these are results that are valid in the context of a text-orientated profession.

2.8.5 From the perspective of the drawing office, it is evident that those who commission images are likely to be senior practitioners -- project managers and senior archaeologists -- who are equally likely to retain overall responsibility for the authorship of a publication; indeed it is through the relentless medium of the monograph (a mediated territory whose mediators are those who control authorship) that the majority of images produced by specialist illustrators circulate around the profession.

2.8.6 While the monograph provides a depository for the majority of images produced by specialist illustrators, grey literature also accounts for a substantial amount of visual material, a trend that seems to be on the increase due to commercial pressures arising from the implementation of PPG16 in the early 1990s. Although issues of access have undermined the role of grey literature beyond their rationale as a condition of planning, the OASIS project now offers a central depository point for digitised reports. Nevertheless, visual materials from the original report do not always survive into the archive.

Because of the increased competition for work in contract archaeology we have to concentrate on producing grey lit reports . . .

VIA 2010 Snapshot Survey, Feedback

How do we deal with these matters in a discipline which remains strongly text-bound but which operates in a world of proliferating new visual media?

VIA Workshop

As more work moves into digital publishing I am finding myself searching for training in this area, or at least basic information.

VIA 2010 Snapshot Survey, Feedback

2.8.7 As reported in numerous studies, the profession comprises high levels of graduates whose training is informed by QAA benchmarking standards, standards which clearly define the discipline as a predominantly textual activity:

Archaeology is concerned with 'writing history' in the sense of furnishing and evaluating narrative accounts of past cultures and societies, both prehistoric and historic.
QAA 2007:3

2.8.8 This statement is made in the context of a period which has, as one of its defining features, created conditions for the proliferation of visual forms in the areas of media, communication and information; a shift to the visual which seems to have accelerated over the past 20 years. Institutionalised, dominant forms of written media are increasingly subject to the effects of social and cultural change evident in the saturating effects of today's mediasphere (Debray 1996). Such effects typically require us to navigate and decode a hybrid network of forms – images, texts and sounds – rather than follow an entrenched commitment to a single mode of information transmission.

2.8.9 The means of communicating archaeology has largely resisted fundamental reconfiguration as no coherent alternative has emerged to challenge the influence of the orthodox model of publication. Specialist illustrators report that barely 10% of the images they produce are destined for dissemination through the internet; alternatively paper-based publications are the destination for at least 75% of all images.

2.8.10 Expectations embedded in paper-based publication confines the results of archaeological investigations to the effects of controlled circulation across a restricted disciplinary locale for the benefit of a largely familiar audience. In this sense, visual materials are isolated and only partially visible in the penumbra of scholarly spectatorship whereby a restricted audience is expected to experience them and work with them.

2.9 ***Networked Images***

2.9.1 There is little doubt that at some point in the future the profession will be compelled to adopt inter-connected, multi-media systems of transmitting what-we-know although little consensus has been reached on how the industry might effectively move from paper-based publication to forms of digital transmission.

2.9.2 A decade ago (Jones *et al* 2003), efforts were made to systematically map how publications were utilised within the profession and to signpost future dissemination strategies formulated around an integrated multi-media approach. Whilst PUNS alerted the profession to the possibilities of exploring alternatives to the traditional publication model, its approach was partial in that its focus was firmly textual – the historic deployment of images on the printed page and their potential to articulate the results of research in a multi-media environment were effectively peripheral to the project.

2.9.3 Although the PUNS project reflected the confines of the discipline's textual paradigm, it nevertheless attempted to systematically bear down on a tradition established in the late nineteenth century, constructed on the premise

of a paper archive and to assess its value in the conditions prevailing at the outset of the twenty-first century.

2.9.4 The orthodox model of publication has persisted regardless of growing financial pressures across the 1960s/1970s and, more recently, the restructuring of archaeology in the 1990s. Over these periods, high-level policy reviews sought to alleviate the obligations of preservation through publication (AMB 1975, Cunliffe 1983; English Heritage 1991) whilst maintaining its core principles. Voices suggesting selective publication strategies reflecting the importance of a site, of questioning the objectivity of the report model, and the possibility of introducing the hope of multi-voicing within a report, passed largely unheeded (Hodder 1989; Carver 1992; Richards 1995).

2.9.5 Contributors to the VIA project have critically presented numerous responses to the challenges of making known the results of archaeological research by combining digital media in novel and innovative forms, typically utilising what is now considered ubiquitous technologies. As contributors to the VIA project have shown, the norms of transmitting and communicating information -- as it is embedded in our everyday life -- seem to be pushing in at the boundaries of the profession. Whilst digital technologies have resulted in a profound impact on the production and networking of images across society in general, its impact on the formal dissemination of knowledge within archaeology has been, at best, piecemeal.

2.9.6 ***How, or if, the power of the traditional publication model will ultimately be replaced within the profession, what the driver for change will be, and what shape an alternative model will take is open to much conjecture. However, it is arguable that whilst we may not have the benefit of long-term perspectives on the impact of developing digital technologies, we do have a medium-range viewpoint within archaeology and across other disciplines to undertake a comprehensive review of digital technologies deployed in the transmission and communication of knowledge, and to identify models of best practice. See Recommendation 11.***

... there will always be a need to communicate data and to ensure that the protocols and procedures of the research effort remain as rigorous as the discipline requires, but if visualisation can propose a different order in things, a recalibration of values, it could develop not merely a new interface in the dissemination of archaeological work but a change in the nature of archaeology itself.

VIA Workshop

However, it is our opinion that what we presently propose as methodological principles will acquire an increasingly greater importance in a future in which digital communication and visualisation technologies will pervade every aspect of culture.

London Charter website

2.10 ***Ethical Transparency***

2.10.1 The validity of visual reconstructions based on the interpretative process has attracted debate within the discipline, none more so than around issues of communicating uncertainty. This area has particularly developed and matured in the application of Virtual Reality (VR) within archaeology and other subject disciplines across the cultural heritage sector. An exploration of themes centring on reliability and the annotation of reconstruction models, highlighted that information generated through research which was essential for the understanding and evaluation of VR models -- labelled paradata, was being lost. Through a process of consolidation and consultation, a series of principles were established which intended to cover the range of Arts & Humanities-based disciplines utilising 3D visualisation for research and dissemination; these principles now form the London Charter (Denard 2009). As a development of the London Charter and branded the Seville Charter (SEAV 2010), discipline-specific principles have now been drafted for VR practitioners in archaeology.

2.10.2 As the London Charter website states, conventional methods of research and dissemination operate within an established framework evolved out of long histories of methodological and theoretical debate; however the 2D imaging community has largely been at the edge of that debate. Indeed, it would appear for those generating 2D images, the imperative to get visual material right and make the supporting evidence available is seldom evident, nor, indeed, does the orthodox publication model encourage discourse that explores the mediated nature of the visual narratives it employs.

2.10.3 Although 2D (traditional) and 3D (contemporary) imaging is often presented as two distinct methodologies, at a fundamental level there is a degree of similarity, notably a shared digital work environment and the active role of imaging in the research process. While ethical issues may be less formally articulated toward 2D imaging practices, it does have an established set of conventions; conversely, conventions for 3D practitioners are under development but there is an emerging and coherent ethical basis for VR work. Standards across 2D and 3D imaging communities are poorly defined. Both sets of practitioners are working towards addressing these issues but at varying rates and with differing priorities.

2.10.4 **Both the 2D and 3D communities would benefit from a formal working partnership in establishing benchmarks for academic rigour, authority claims and a common semantic framework for documenting research sources. Further, such a partnership between the respective representative bodies could jointly work towards a statement of occupational standards and the development of accredited training/CPD programmes. Both communities could act to bring together key stakeholders and practitioners across the profession in a process of consultation. See Recommendation 2.**

2.11 Summary

2.11.1 The themes developed throughout this section arise from collaborative work and consultation undertaken during the VIA project's range of activities. Within the remit of this report, attention has been focused on issues relating to developing and promoting professional practice in the production and deployment of visual materials relating to archaeological investigations. In addition, it is intended to establish and strengthen partnerships between HEIs and the professional specialist illustration sector.

2.11.2 The report's recommendations signpost future work intended to be undertaken by English Heritage in partnership with key stakeholders across the profession and in education. Building on the VIA project's ethos of widespread, active engagement with all those working in the sector, the recommendations are explicitly intended to:

- build a strategic framework towards sector-wide policies for skills and curriculum development;
- define and promote professional practice;
- provide on-going sector intelligence;

Are we clear about the responsible or ethical deployment of visual images ... which besides transmitting information which is processed discursively, also work subliminally, by-passing discursive consciousness and impacting directly on the emotions?

VIA Workshop

The American Institute of Graphic Arts is a professional association of designers at all phases of their careers. AIGA's professional framework comprises four areas: Experience and Knowledge, Strategic Process, Compensation and Financial Practices, and Ethical Standards. AIGA also helps to establish standards for undergraduate and graduate degrees in design, communicate the importance of design, and stimulate the sector through events, social media and its website.

www.aiga.org

- establish an intelligence hub to identify new research, and undertake forecasting and planning;
- share knowledge and encourage debate through a variety of events;
- create a dynamic, internationally recognised virtual resource.

2.11.3 *In providing an intellectual ‘space’, the VIA project has optimised the potential for collaborative debate and research between practitioners, academics and the profession’s representative bodies, essentially providing an independent agency for change outside of, but fully inclusive of, any one institution. In order for that spirit of collaboration to be fully realised and to work towards the strategic implementation of this report’s recommendations, the establishment of an academy will maximise connectivity across the sector in order to identify future research and target funding to trigger research activity. See Recommendation 12.*

3 Organisations, In-house Specialist Illustrator Teams and Specialist Illustrators: A Profile

This section presents details of in-house illustration teams across England, the specialist illustration staff employed in them, and the senior illustration staff who manage them. The audit offers overall figures across all organisations, followed by a breakdown of the figures according to organisation size.

3.1 *Distribution of In-house Specialist Illustration Teams*

3.1.1 During late 2009/early 2010, a total of forty-one specialist in-house archaeological illustration teams were identified operating in thirty-seven England-based organisations.

Region	All	Survey return
Eastern	7 (17%)	6 (15%)
East Midlands	2 (5%)	0 (0%)
London	7 (17%)	5 (12%)
North East	2 (5%)	2 (5%)
North West & Mersey	3 (7%)	3 (7%)
South East	5 (12%)	5 (12%)
South West	5 (12%)	5 (12%)
West Midlands	4 (10%)	2 (5%)
Yorkshire & The Humber	6 (15%)	5 (12%)
Total	41 (100%)	33 (80%)

Table 3.1: Geographic distribution of in-house specialist illustration teams

3.2 *Size of In-house Specialist Illustration Teams*

3.2.1 In-house teams employ approximately one hundred specialist archaeological illustrators across England. Data collected from the VIA snapshot survey returns provided detailed information on thirty-three in-house teams located in organisations of various size.

Organisation Size	In-house teams	Number of illustrators	Average per team
All	33	80	2.4
Small	19	32	1.7
Medium	6	34	5.7
Large	8	14	1.8

Table 3.2: In-house illustration teams by organisation size

3.3 In-house Specialist Illustrators

3.3.1 The VIA project collected detailed information from eighty specialist archaeological illustrators employed in thirty-three in-house archaeological illustration teams across England.

Full-time	63 (79%)
Part-time	17 (21%)

3.3.2 Employment between full- and part-time illustrators, exhibited a much stronger differential in favour of full-time employees than suggested by the majority of surveys carried out since 2003 (Fig 3.1). Except for the earliest and the most recent surveys, the ratio between full- and part-time employees over the period 2003-10 appears to be gradually strengthening in favour of full-time employment.

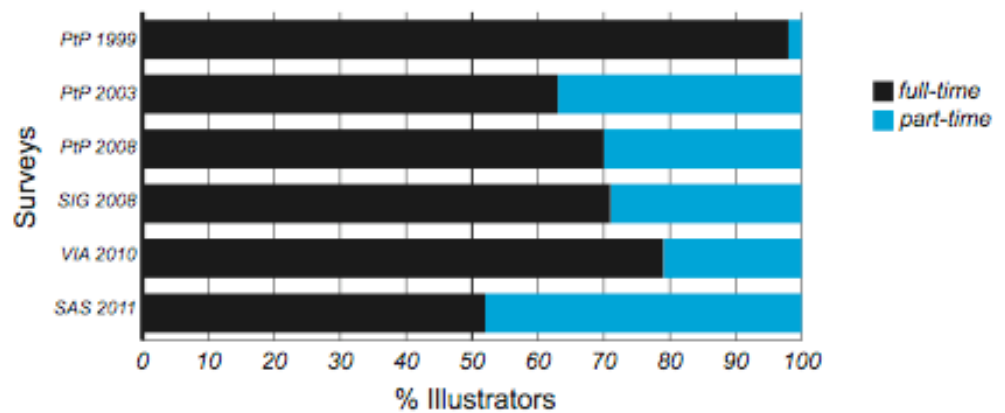


Fig 3.1: Employment status 1999-2011

Sources: *Profiling the Profession (PtP)* (Aitchison 1999; Aitchison & Edwards 2003, Aitchison & Edwards 2008), *SIG Survey* (Hodgson 2008), *2010 VIA Snapshot Survey*, and *SAS Survey* (Aitchison 2011)

3.3.3 Ratios of full- and part-time specialist in-house illustrators across all organisations stand at 3.7 full-time illustrators to every single part-time illustrator (3.7:1). However, results according to organisation size are variable, with a much closer ratio of full- and part-time employees in small size organisations (1.7:1), a much wider ratio in large size organisations (6:1) and a minority of part-time illustrators employed in medium size organisations (10:1). (Fig 3.2)

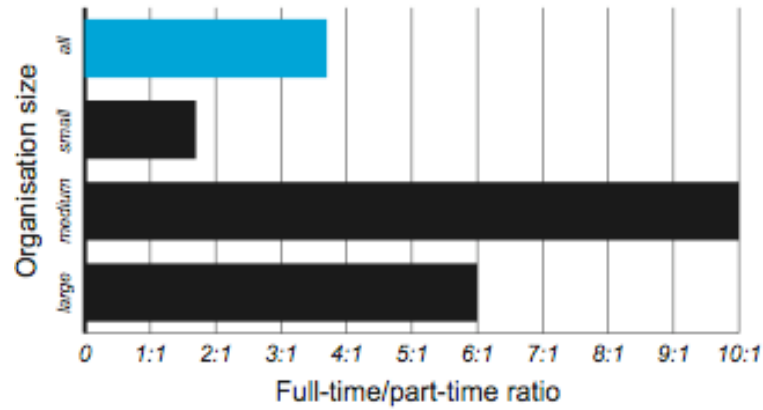


Fig 3.2: Ratio of full-time and part-time specialist illustrators by organisation size

3.4 Gender Balance

3.4.1 The VIA project identified forty-one female (51%) and thirty-nine male (49%) in-house specialist illustrators.

3.4.2 Comparative data relating to gender balance among specialist illustrators drawn from six surveys over the period 1999-2011, indicates an ebb and flow of gender representation (Fig 3.3). For the period 2003-2008, the Profiling the Profession project records a marked progression toward greater female representation among specialist illustrators. Both the 2008 SIG and 2010 VIA surveys record a much tighter gender balance among their respondents. The 2011 Survey of Archaeological Specialists stands alone in recording strong male representation among specialist illustrators.

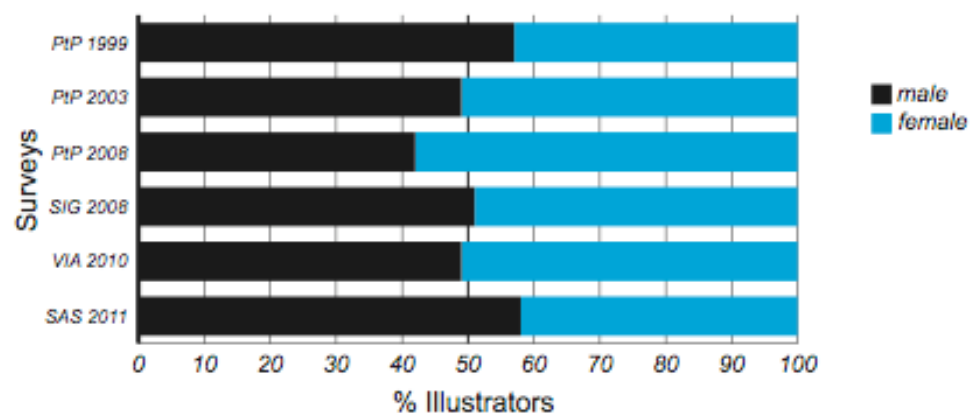


Fig 3.3: Gender balance 1999-2011

Sources: Profiling the Profession (PtP) (Aitchison 1999; Aitchison & Edwards 2003, Aitchison & Edwards 2008), SIG Survey (Hodgson 2008), VIA 2010 Snapshot Survey and SAS Survey (Aitchison 2011)

3.4.3 Gender distribution recorded by organisation size reveals strong female representation in medium size organisations but majority male representation in small and large organisations.

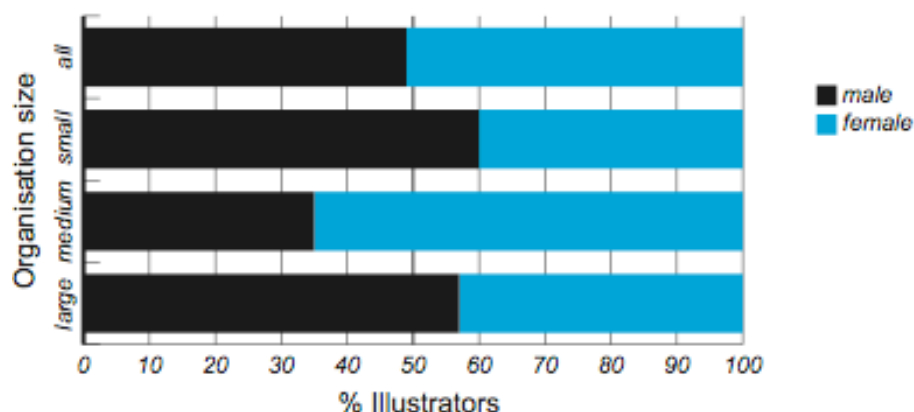


Fig 3.4: Gender balance by organisation size
Source: VIA 2010 Snapshot Survey

3.5 Age Range

3.5.1 Three-quarters (75%, all posts 82%) of in-house specialist illustrators are aged 20-50 years, 58% (all posts 55%) aged between 30-50 years, and one quarter (25%, all posts 16%) over 50 years. Almost half (46%, all posts 58%) are aged 20-40 years and 17% are under 30 years (28% all posts). (Table 3.3)

Age range	Specialist illustrators	All posts
under 20	0 (0%)	1%
20-29	14 (17%)	27%
30-39	23 (29%)	31%
40-49	23 (29%)	24%
50-59	16 (20%)	14%
60 and over	4 (5%)	3%
Total	80 (100%)	100%

Table 3.3: Age range of specialist illustrators
Source: VIA 2010 Snapshot Survey and Profiling the Profession (Aitchison & Edwards 2008)

3.5.2 Average age calculated by organisation size indicates specialist illustrators employed in large organisations are significantly older than average. Illustrators employed in medium size organisations are on average 13 years younger than their

colleagues in large organisations. Illustrators employed in small organisations are of average age. (Fig 3.5)

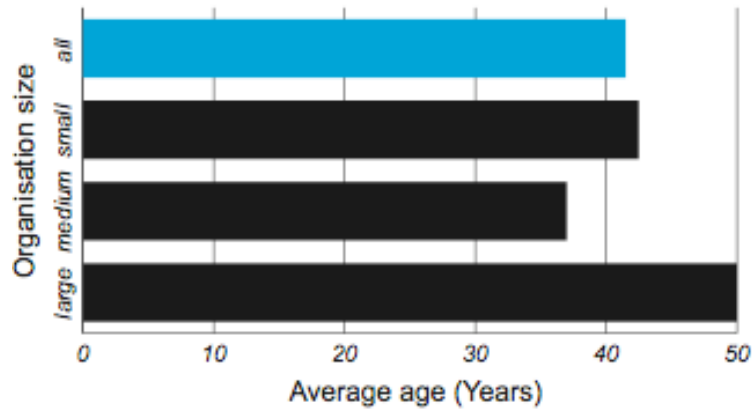


Fig 3.5: Average age by organisation size

3.5.3 The overall average age for specialist illustrators recorded across the period 1999-2010 indicates a general ageing of the workforce. (Fig 3.6)

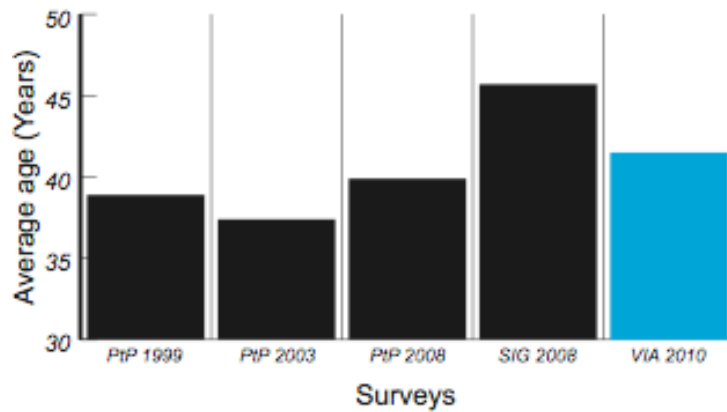


Fig 3.6: Average age 1999-2010

Source: *Profiling the Profession (PtP)* (Aitchison 1999; Aitchison & Edwards 2003, Aitchison & Edwards 2008), *SIG Survey* (Hodgson 2008) and *VIA 2010 Snapshot Survey*

3.5.4 Female illustrators outnumber their male counterparts in the 20-40 age range, male representation is stronger among the 40-60 age group, and equilibrium for those illustrators aged 60+. Female representation among specialist illustrators has increased over the past 15-20 years. (Fig 3.7)

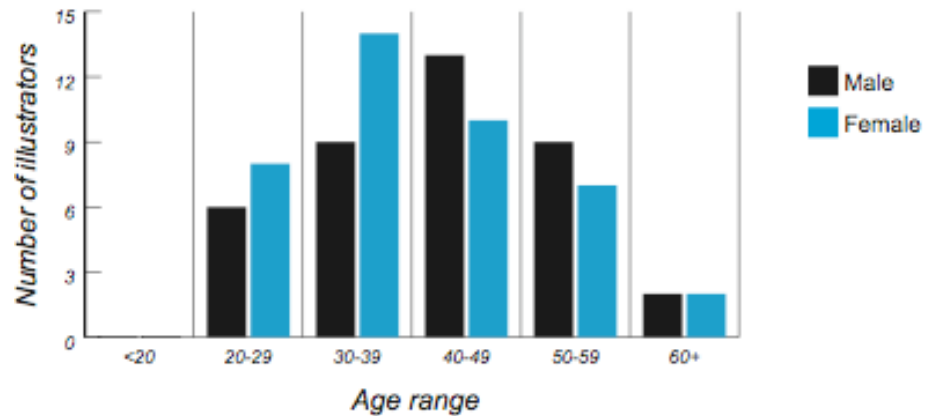


Fig 3.7: Illustrator age range by gender

3.6 Experience

3.6.1 The average length of professional experience for an in-house specialist illustrator is 13.7 years, somewhat less than the figure of 15.8 years recorded by Aitchison (2011:300). Illustrators employed in small size organisations mirror the specialist sector's average (13.7 years), whilst their colleagues employed in medium size organisations exhibit lower average experience of 11 years (Table 3.4). Illustrators employed in large organisations have substantially higher rates of professional experience (19.9 years). (Table 3.4)

Experience (Years)	<2	3-10	11-20	20+
All	5	29	19	27
Small	3	10	8	11
Medium	2	17	11	4
Large	0	2	0	12

Table 3.4: Specialist illustrators' experience by organisation size

3.6.2 The vast majority of early entry illustrators work in small and medium size organisations. The majority of illustrators with 20+ years' experience work in small or large organisations. Virtually no entry level illustrators are employed in large organisations, in fact almost all illustrators employed in large organisations have 20+ years experience.

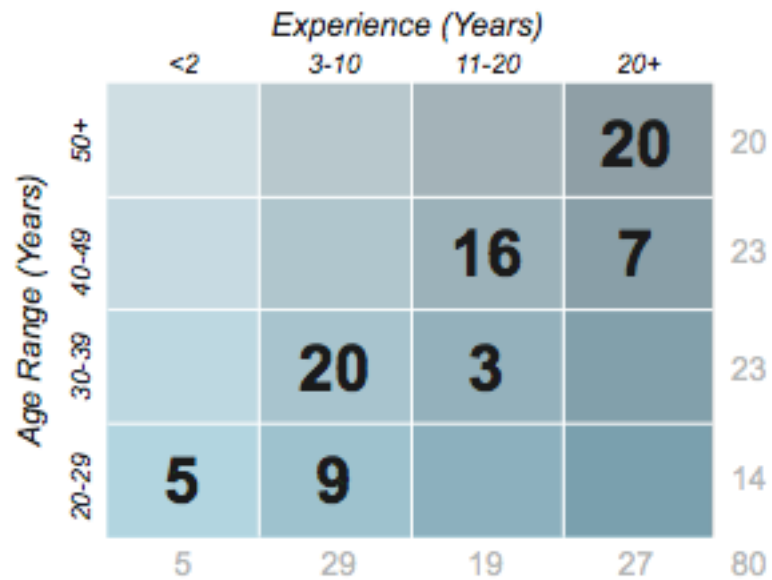


Fig 3.8: Specialist illustrators' professional experience and age range

3.6.3 One third of specialist illustrators have 20+ years of professional experience and are aged over 40 years. Almost one quarter (24%) of illustrators have 11-20 years' experience and are in the 30-50 age range. Over one third (36%) of illustrators have 3-10 years' experience and are in the 20-40 age range. 6% of illustrators have 2 years' or less experience and are in the 20-29 age range. (Fig 3.8)

3.6.4 It appears that a contraction of employment opportunities for entry level illustrators may threaten the future pool of illustration specialists, especially as large size organisations almost exclusively favour retaining their late-career illustrators.

3.7 Ethnic Diversity

3.7.1 Ethnic diversity does not present itself among in-house specialist illustrators.

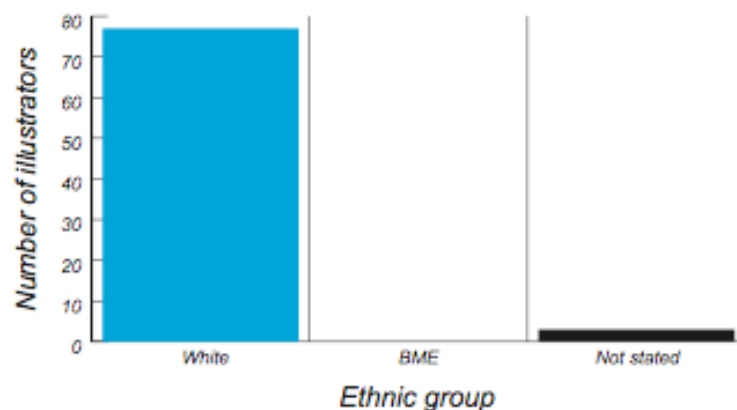


Fig 3.9: Ethnic diversity

3.8 Senior In-house Illustration Staff

3.8.1 Gender balance among senior illustration staff shows a strong imbalance in favour of male representation (37% female; 63% male). When analysed across organisation size the results are variable. Gender balance recorded in small size organisations among senior illustration staff exhibit greater weighting towards male representation (44% female; 56% male), in medium size organisations female representation is particularly strong (60% females: 40% males), and in large size organisations males dominate (100% males). (Fig 3.10)

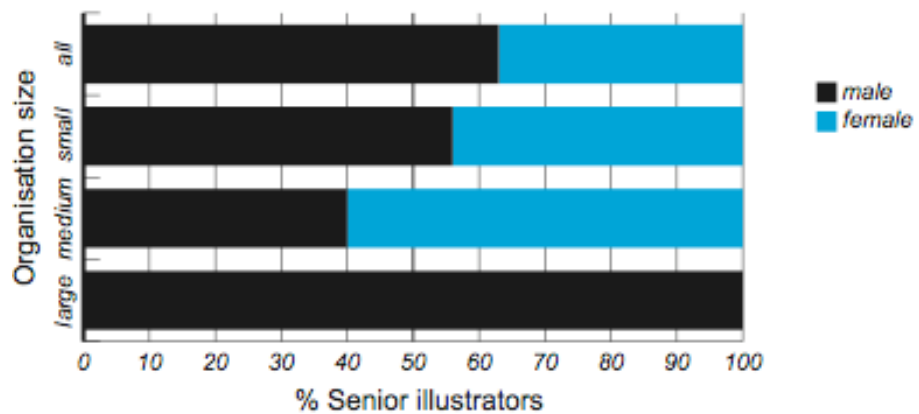


Fig 3.10: Senior illustration staff, gender balance by organisation size

3.8.2 Average age for all senior illustration staff was recorded as 48 years (female 45 years; male 50 years). At the organisational level average age was recorded as 49 years in small organisations (female 47 years; male 52 years), 42 years in medium organisations (females 43 years; males 41 years) and 53 years in large organisations (females n/a; males 53 years). (Fig 3.11)

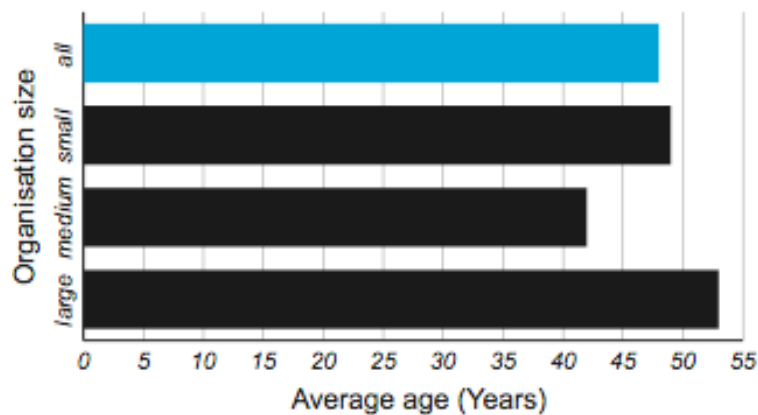


Fig 3.11: Senior illustration staff, average age by organisation size

3.8.3 Senior female staff are in the majority across the 30-50 age range, but their male counterparts dominate in the 50+ age range. (Fig 3.12)

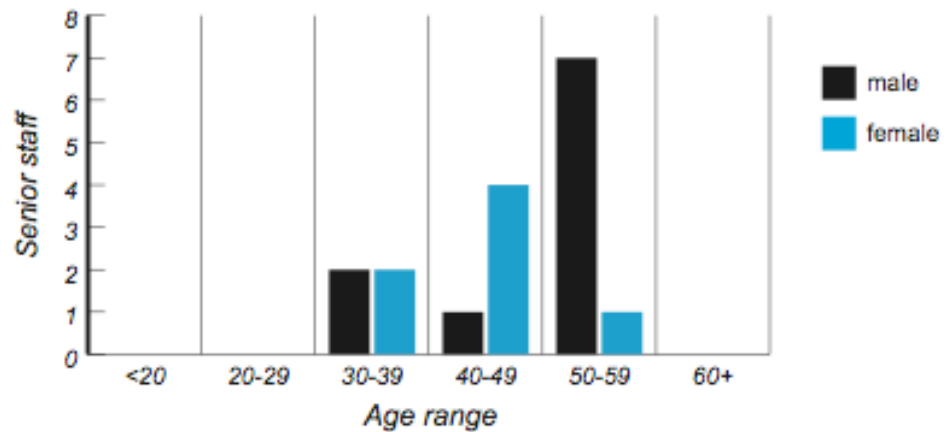


Fig 3.12: Senior illustration staff, age range by gender

3.8.4 Average professional experience for senior Illustration staff was recorded at 20 years -- that pool of experience is set to increase as seventeen respondents reportedly continued to regularly undertake illustration and graphics duties. From the organisation perspective, average experience was recorded at 20 years in small organisations, 17 years in medium organisations and 25 years in large organisations. (Table 3.5)

Experience (Years)	<2	3-10	11-20	20+
All	1	0	7	11
Small	1	0	4	4
Medium	0	0	2	3
Large	0	0	1	4

Table 3.6: Senior illustration staff, experience by organisation size

3.9 Summary: In-house Specialist Illustration Teams

3.9.1 In-house illustration teams are reasonably well represented across all regions of England, with particular emphasis to the south and east. Other than the East Midlands region, the VIA project gathered representative data from in-house teams across all regions of England.

3.9.2 Small organisations dominate the archaeology sector (Aitchison & Edwards 2008: 35) and it is here the majority of in-house illustration teams are located, employing 40% of specialist

illustrators. Medium size companies feature the lowest number of in-house teams, but employ the majority of specialist illustrators (42%). Large organisations have slightly more in-house teams than found in medium size organisations, but employ the least amount of specialist illustrators (18%).

3.10 **Summary: In-house Specialist Illustrators**

3.10.1 The VIA project has identified an estimated 100 specialist in-house illustrators employed in England -- the 2010 VIA Snapshot Survey collecting data on eighty illustration specialists working in thirty-three in-house teams.

3.10.2 The number of specialist illustrators recorded working in the sector appear to have increased over the period 1999-2008. Each of the Profiling the Profession surveys include employed and freelance illustrators working across the UK. Similarly, the SIG survey includes employed and self-employed illustrators who are, in the main, AAI&S members drawn from across Europe and the UK. The VIA project results specifically recorded the numbers of specialist in-house illustrators employed across England, excluding freelance illustrators and specialist illustrators employed in university archaeology departments. The strength of the VIA survey was based on a strategy of directly contacting organisations to identify all in-house illustrators and, consequently, achieved a highly representative survey sample. (Fig 3.13)

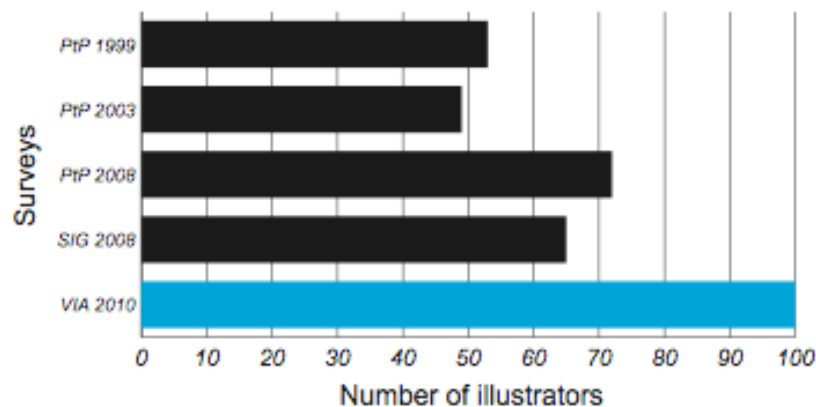


Fig 3.13: Recorded numbers of specialist illustrators 1999-2010 Source: Profiling the Profession (PtP) (Aitchison 1999; Aitchison & Edwards 2003, Aitchison & Edwards 2008), SIG Survey (Hodgson 2008) and VIA 2010 Snapshot Survey

3.11 **Summary: Organisations, In-house Specialist Illustration Teams, and Specialist Illustrators**

3.11.1 The specialist illustration sector is represented by 41 in-house illustration teams across England, employing some one hundred specialist illustrators. In-house illustration teams are located

in organisations of all sizes, with an average team size of 2.4 employees. In-house specialist illustrators have an average age of 41.5 years, have an average of 13.7 years' professional experience, are four times more likely to be employed on a full-time basis rather than employed part-time, and their number comprise a largely even gender balance. However, substantial differences arise when these figures are examined according to organisation size.

3.11.2 The majority of in-house illustration teams (58%) are located in small size organisations and comprise a lower than average number of illustrators per in-house team (1.7 employees). These teams employ a high proportion of specialist in-house illustrators (40%) -- the majority of whom are male, comprise a high number of part-time employees (38%), have levels of professional experience (13.7 years) comparable to the specialist sector's average, and an average age of 42.5 years which is also close to the specialist sector's average.

3.11.3 Medium size organisations have the lowest number of in-house illustration teams (18%) but the highest average team size (5.7 employees). They employ the majority of specialist in-house illustrators (42%) -- the mostpart of whom are female (65%), are almost exclusively employed full-time (90%), have the lowest average level of experience (11 years), and have the lowest average age range (34 years).

3.11.4 Large size organisations have almost one quarter of in-house illustration teams (24%), yet a lower than average team size (1.8 employees). They employ the fewest number of all specialist illustrators (18%) -- the majority of whom are male, are mostly employed full-time (86%), have substantially higher average levels of experience (19.9 years), and have a significantly higher than average age range (50 years).

3.11.5 The non-inclusion of black and minority ethnic groups is a problem for this specialist sector – as it is for the profession as a whole.

3.12 **Senior Illustration Staff**

3.12.1 Overall, senior staff managing in-house graphics teams are recorded as having a relatively high average age (48 years), are all employed full-time, have a strong gender imbalance in favour of male employees, and have very high average levels of professional experience (20 years). The majority (90%) continue to practise as illustrators.

3.12.2 Senior graphics office staff employed in small size organisations are just over the average age (49 years), feature a gender imbalance towards male employees, and exhibit average levels of professional experience. Over three-quarters continue to be practising illustrators.

3.12.3 Senior graphics staff employed in medium size organisations are of a lower average age (42 years), have high female representation, and have lower than average levels of professional experience (17 years). All are practising illustrators.

3.12.4 Senior graphics staff employed in large size organisations are of high average age (53 years), are exclusively male, and have high levels of professional experience (25 years). All are practising illustrators.

4 Qualifications

This section maps qualifications obtained by specialist illustrators. Although the following pages report and analyse the norm that most employees are educated to first degree level or above, this does not imply that a degree should, in fact, be the *de facto* entry qualification into illustration or graphics in the archaeology sector; indeed, vocational training opportunities — where they exist -- may offer equally valid entry routes into the profession.

4.1 *In-house Specialist Illustrators: Qualifications*

4.1.1 Fewer specialist illustrators have a first degree or higher (81%) than reported across all posts (90%) (Aitchison & Edwards 2008: 55). Illustrators employed in large organisations reveal especially low levels of graduates compared to their colleagues in small and medium organisations. (Fig 4.1)

4.1.2 There are proportionally more specialist illustrators with a first degree as their highest qualification (61%) than found across all posts (51%), and an especially high percentage (72%) among illustrators employed in small size organisations.

4.1.3 Notably fewer specialist illustrators (20%) attain postgraduate qualifications compared to all posts (39%); nevertheless a relatively high level (41%) of illustrators employed in medium size organisations have postgraduate degrees, substantially outstripping levels found among their specialist illustration colleagues employed in small and large organisations.

4.1.4 Illustrators employed in large organisations consistently recorded lower levels of graduate and postgraduate qualifications compared to their specialist illustration colleagues and across the profession as a whole.

4.1.5 11% of specialist illustrators obtained their highest qualification at school or FE college (4% all posts).

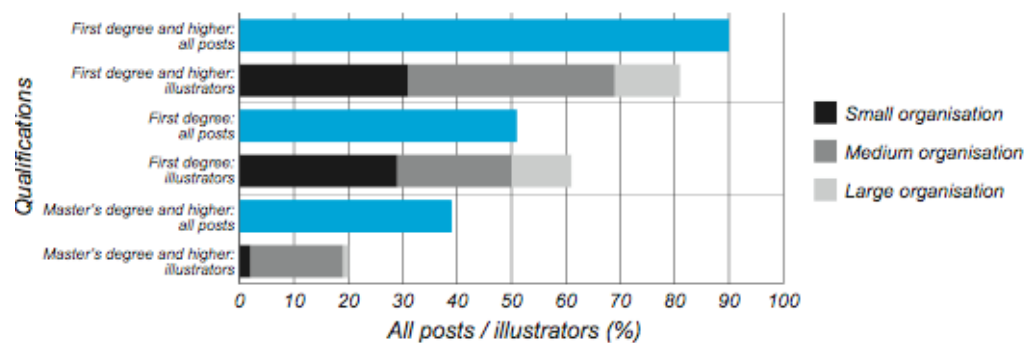


Fig 4.1: Qualifications by illustrators and organisation size

4.1.6 As stated above, there are no specialist illustrators under the age of 20 years, suggesting that most employees are now entering the specialist illustration sector as graduates -- indeed, 93% of illustrators aged 20-29 years hold a first degree or higher. A first degree is the majority qualification over all age ranges and represents the qualification of choice for 85% of those in their 50s and 60s. (Fig 4.2)

4.1.7 Postgraduate degrees are restricted to illustrators under 50 years, with a strong peak for those in their 30s employed in medium size organisations.

4.1.8 Only illustrators under 40 years have a first degree in archaeological illustration and only those in their 40s have a Master's in archaeological illustration.

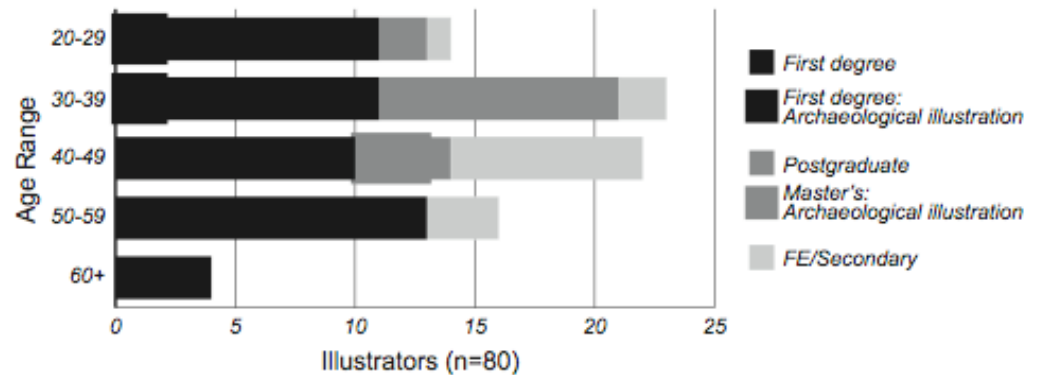


Fig 4.2: Qualifications by age range

4.2 Senior Illustration Staff: Qualifications

4.2.1 Proportionally fewer senior illustration staff (74%) achieved a first degree or higher than reported across the profession (90%), but the percentage of senior illustration staff with a first degree as their highest qualification (48%) shows a closer parity to all illustrators across the specialist sector (51%). (Fig 4.3)

4.2.2 Whilst the proportion of senior illustration staff with postgraduate degrees is lower (21%) than found across the profession (39%), these results are strong compared to the percentage of all specialist illustration employees.

4.2.3 Senior illustration staff working in small size organisations consistently show higher levels of representation across graduate and postgraduate qualification indicators, compared to their senior colleagues working in medium and large organisations.

4.2.4 Senior illustration staff employed in large organisations consistently recorded lower levels of qualifications compared to their senior colleagues in small and medium size organisations, and to all other specialist illustrators and to practitioners across the profession as a whole.

4.2.5 10% of senior illustration staff obtained their highest qualification at school or FE college (4% all posts).

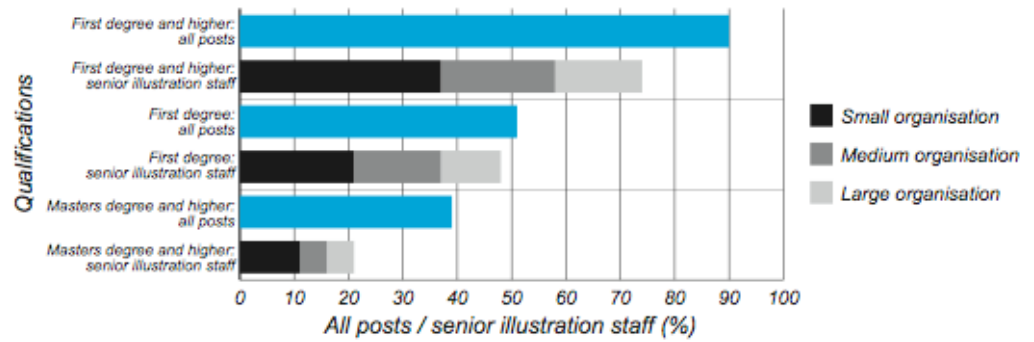


Fig 4.3: Qualifications by organisation size: senior illustration staff

4.2.6 Senior illustration staff with a first degree as their highest qualification are well represented across each of the 30-60 year age ranges, although those in their 40s are proportionally more likely to be graduates.

4.2.7 Postgraduates are highly represented among senior staff in the 30 years age range, but are all but absent among those in their 40s and 50s.

4.2.8 Senior staff whose highest qualifications were gained at school dominate the 50 year age range; dramatically tail off for those in their 40s; and all but disappear for those in the 30 year age range.

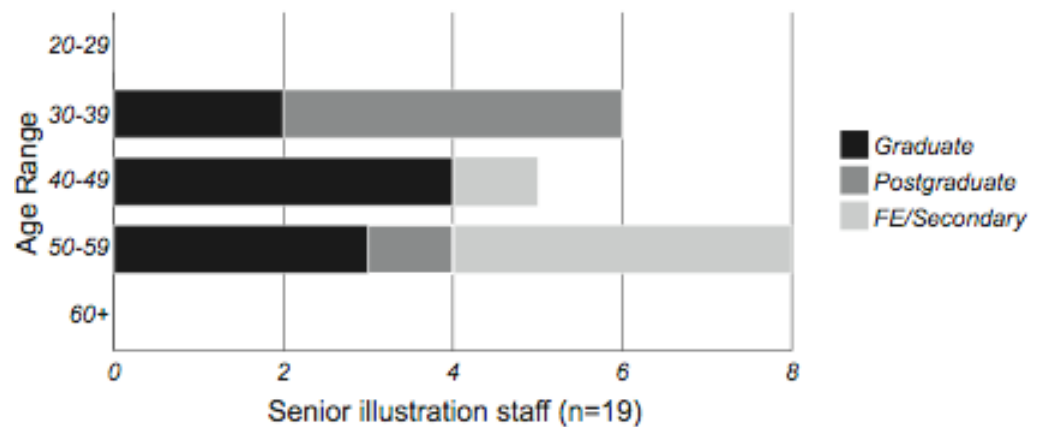


Fig 4.4: Qualifications by age range: senior illustration staff

4.3 Summary: Qualifications

4.3.1 It has been reported over the past decade (Chitty 1999; Aitchison & Edwards 2003:36; Aitchison & Edwards 2008:55) that a degree is virtually the *de facto* qualification for entry into the profession; this is mirrored in the specialist illustration sector where higher proportions of illustrators with a first degree as their highest qualification are evident compared to their colleagues across the profession.

4.3.2 Relatively fewer senior illustration staff have a first degree as their highest qualification than found among their colleagues in the specialist illustration sector or across the profession as a whole.

4.3.3 Postgraduates are relatively poorly represented in the specialist illustration sector, although a notable peak is evident among younger illustrators employed in medium size organisations. Chitty (1999) reported that archaeologists typically enter the profession as graduates and progress to a postgraduate degree, having practised for a number years in the intervening period – a trend that seems to be evident among a section of specialist illustrators in their 30s, who entered the profession in the 1990s, were employed in medium size organisations and who have since progressed to a postgraduate degree. Although still well below the profession's average, this grouping's attainment at postgraduate level stands in sharp contrast to their other colleagues in medium size organisations, and to those in small and large organisations.

4.3.4 Senior illustration staff comprise proportionally fewer postgraduates compared to all posts in the profession, and have less than half the proportion of postgraduates compared to all senior staff across the profession (Aitchison & Edwards 2008: 203).

4.3.5 Proportionally, there are three times as many non-graduates among specialist illustrators (18%) compared to all posts across the profession (6%), with a strong peak among illustrators in their 40s (35%) – possibly, in part, reflecting the impact of those entering the profession through the Manpower Services Commission, an initiative which came to a close in the late 1980s.

4.3.6 Just over one-quarter (26%) of senior illustration staff who are mainly in their 50s and employed in small or large organisations did not gain a qualification through the higher education system -- compared to 6% across all posts, and 1% across all senior posts (Aitchison & Edwards 2008).

5 Continuing Professional Development

Continuing Professional Development is unevenly targeted, accessed and understood across the sector -- no less so than among specialists (Aitchison 2011). Tensions between, on the one hand, the requirements of CPD provision meeting the needs of employers and, on the other hand, training providers responding directly to student demands can be identified in the IfA's call for CPD being primarily the responsibility of the individual. Equally, as indicated below, assumptions relating to the driving force compelling individuals to undertake CPD may misalign its provision and skew any measure of its success.

In responding to the VIA surveys the analysis below represents the opinions and perceptions of specialist illustrators and senior graphics staff to CPD and is, therefore, constructed on no single concept of CDP; although oft repeated, it is recognised within the profession that CPD and training are frequently conflated as one and the same thing. That said, strong patterns are evident in the data around the issues of CPD provision (formal or informal) and its point of delivery (internal or external). These two elements of CPD are considered in light of in-house illustration teams, the specialist illustrators working in those teams, and by size of organisation in which those individuals work.

5.1 *In-house Specialist Illustration Teams Accessing Organisation-Supported Ongoing CPD*

5.1.1 Six (18%) in-house illustration teams representing more than one-third of illustrators (28), benefit from organisation-supported structures providing ongoing CPD for specialist illustration employees.

5.1.2 In contrast, twenty-six (79%) in-house teams representing more than half of specialist illustrators (46), do not benefit from these structures or are not aware that their organisations provide such support.

Access to organisation-based CPD pathways

		Yes	No	Don't know	Not stated	
Organisation size	large	1	7			8
	medium	3	2		1	6
	small	2	15	2		19
		6	24	2	1	33

Fig 5.1: In-house teams accessing organisation-supported ongoing CPD

5.1.3 Illustrators working in in-house teams located in small and large organisations (46 employees) are much less likely to access the benefits of structured ongoing CPD through their employers. Yet despite accounting for 82% of in-house illustration teams, small and large organisations employ proportionally low numbers (57%) of specialist illustrators and one-third of those are employed part-time.

5.1.4 Illustrators working in in-house teams located in medium size organisations are more likely to access structured ongoing CPD from their employers. Although relatively few in number (18%), these in-house teams account for proportionally high numbers (43%) of specialist illustrators, 90% of whom are employed full-time.

5.2 In-house Specialist Illustrators' Access to Provision and Delivery of CPD

5.2.1 82% (66) of in-house specialist illustrators access informal or formal CPD provision that is delivered on-the-job or off-the-job. 18% (14) of illustrators do not undertake CPD.

5.3 Formal and/or Informal Provision of CPD

5.3.1 62% (50) of in-house illustration staff access informal CPD provision, and 35% (28) access formal CPD. Of those staff who access either formal or informal CPD, 15% (12) experienced CPD through a mix of both informal and formal provision. (Fig 5.2)

5.3.2 The proportion of illustrators only undertaking informal CPD is widely represented across all organisations, but is particularly high in small and medium organisations, equating to half of illustration employees in those organisations.

5.3.3 Illustrators accessing a mix of informal and formal CPD are restricted to those employed in small and large organisations.

5.3.4 Illustrators exclusively undertaking formal CPD provision are only found in small and medium size organisations, although illustrators only accessing formal CPD in small organisations are the exception rather than the rule.

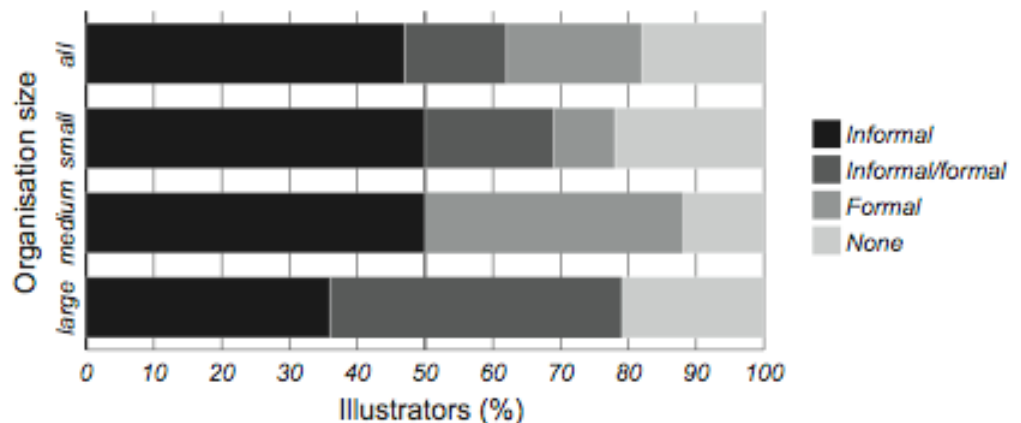


Fig 5.2: Specialist in-house illustrators accessing formal and/or informal CPD provision

5.4 On-the-job and/or Off-the-job Delivery of CPD

5.4.1 70% (56) of in-house illustration staff undertake CPD provision that is delivered on-the-job. 38% (31) undertake CPD that is delivered off-the-job. Of those illustrators accessing CPD provision delivered either in- or off-the-job, 26% (21) experience CPD through a mix of both in- and off-the-job delivery. (Fig 5.3)

5.4.2 On-the-job delivery of CPD provision for specialist illustrators is widely represented across all organisations, but is particularly dominant in medium size organisations.

5.4.3 Illustrators utilising a combination of in- and off-the-job delivery of CPD, are similarly featured across all organisations but are, again, strongly represented in medium size organisations.

5.4.4 Illustrators only accessing off-the-job delivery of CPD, are in the minority and restricted to small and large size organisations.

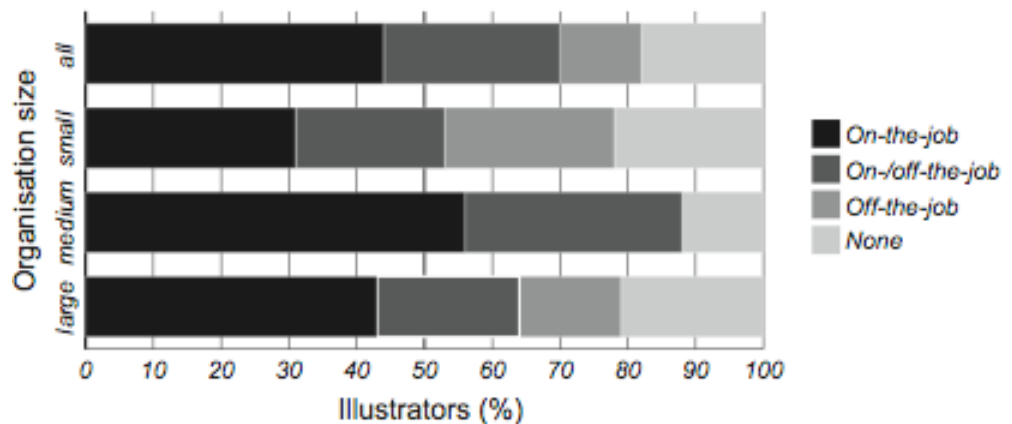


Fig 5.3: Specialist in-house illustrators accessing on-the-job and/or off-the-job delivery of CPD

5.5 Co-relation between CPD Provision and its Point of Delivery

5.5.1 Half of specialist in-house illustrators do not vary their form of CPD provision nor the point of its delivery.

5.5.2 The other half of illustrators do, yet when the figures are dissected in each case the results represent a minority of illustrators: just over a quarter of illustrators (26%) vary their point of CPD delivery; 15% vary their form of CPD provision; fewer than one-in-ten vary CPD provision and its delivery point.

5.5.3 Almost half of in-house specialist illustrators (48%) undertake informal CPD that is delivered through a combination of delivery points.

5.5.4 Formal CPD provision is delivered almost exclusively on-the-job. No illustrators undertake formal CPD provision through a variety of delivery points.

5.5.5 No illustrators undertake a combination of formal and informal CPD which is delivered off-the-job.

5.5.6 The majority (70%) of illustrators undertake CPD provision that is delivered on-the-job.

5.5.7 A minority of illustrators (13%) undertake CPD that is only delivered off-the-job, whilst almost half (44%) undertake CPD that is only delivered on-the-job.

CPD point of delivery

		<i>In-job</i>	<i>Off-job</i>	<i>In-job / Off-job</i>	
<i>CPD provision</i>	<i>Informal</i>	17	7	14	38
	<i>Formal</i>	13	3	0	16
	<i>Informal / Formal</i>	5	0	7	12
		35	10	21	66

Fig 5.4: Specialist in-house illustrators' access to formal and/or informal CPD through on-the-job and/or off-the-job delivery

5.6 Summary

5.6.1 Although obligatory for IfA corporate members since 2009, CPD as a mechanism has historically been misunderstood by wide sections of the IfA's membership since the formulation and launch of its CPD scheme in 2000 (Aitchison 2003; Aitchison & Geary 2008; ATF 2008:8-9). Pre-dating the CPD scheme, IfA members had been offered the opportunity to access and utilise proto-mechanisms for the construction and recording of CPD almost as far back as the introduction of PPG16 and the sector's push for professionalisation (IFA 1993).

5.6.2 Despite a legacy of developing CPD structures extending back over two decades -- and their promotion to members through the IfA's quarterly magazine and through its website -- it is acknowledged that CPD and workplace training are still persistently conflated as one and

the same by individuals and by organisations (Aitchison & Edwards 2008:101). See Recommendation 8.

5.6.3 In the case of specialist illustrators, non-IfA members make up the majority (81%) of their number so it would be expected that agreement on what constitutes CPD is likely to be even less aligned. This perhaps, a cautionary tale to any project aiming to better understand the provision and nature of CPD across the archaeology sector through the vehicle of practitioner questionnaires.

5.6.4 Nevertheless, access to formal and informal CPD through a variety of delivery points is well represented across the profession, but as Aitchison (2011:36) also identifies, access to CPD by specialists, particularly specialist illustrators, is highly problematic.

5.6.5 Preferred CPD methods across the profession comprise formal on-the-job training courses and formal off-the-job training provision. In contrast, formal provision of CPD for the specialist illustration sector is, in comparison, poorly represented – especially among in-house illustration teams accessing external training courses, representing just 9% of in-house illustration teams employing 13% of specialist illustrators. (Table 5.1)

Methods of CPD	Sector-wide organisations	In-house illustration teams
Formal / on-the-job	65%	18%
Formal / off-the-job	71%	9%
Informal / on-the-job	55%	42%
Informal / off-the-job	55%	36%

*Table 5.1: Organisations' with in-house illustration teams preferred methods of CPD
Source: Aitchison & Edwards 2008:102; 2010 VIA Snapshot Survey*

Whilst there is clearly a case for continually 'raising the game' of UK SMEs in relation to skills, policy approaches must recognise the reality of the situation facing most SMEs and help to facilitate solutions that build on appropriate practice. For small firms this may require a need to explicitly recognise the role of informal learning in the workplace, to help identify what is effective informal workplace learning and promote this more widely to SMEs.

UKCES 2010

5.6.6 On-the-job mentoring and off-the-job informal CPD provides by far the majority of opportunities for in-house specialist illustrators, especially for those employed in small and large organisations.

5.6.7 Considering the breadth of activities identified as constituting CPD, half of specialist illustrators do not vary the provision of CPD (formal/informal) nor do they vary the point of its delivery (on-the-job/off-the-job), a situation particularly evident in medium size organisations.

5.6.8 Only 15% of illustrators vary their form of CPD provision and they are restricted to small and large organisations. Just 10% of specialist illustrators vary both the provision of CPD and its point of delivery.

5.6.9 As the IfA repeatedly announces, the best way for the profession to develop and maintain its professional profile is through its membership's responsibility to plan and implement CPD. Indeed, the Archaeology Training Forum (Aitchison 2008:26) states that it is entirely reasonable for individuals to

invest in their own CPD provision as they are the main beneficiaries -- benefits which are primarily linked to issues of career development, and thus related to better earning power (Bishop *et al* 1999, Aitchison 2008). Nonetheless, these claims have not been tested within the profession.

5.6.10 Although the IfA forefronts the benefits of CPD in terms of career progression and therefore for improved remuneration, a high proportion of UK-based professionals undertaking CPD did so through a sense of professional duty – considerably less saw issues of career development as a principal driver (PARN 2008:9-10).

5.6.11 Organisations state they support CPD but it is widely acknowledged within the profession that opportunities for career development are hindered by poorly defined frameworks of career progression. In addition, practitioners do not objectively demonstrate the development and maintenance of their skills through a sufficiently funded, formalised CPD mechanism that is based on formal skills audits undertaken by the individual and her/his organisation.

5.6.12 Although CPD is obligatory for corporate members of the IfA, organisations are not compelled to provide appropriate support for their employees, unless the organisation enjoys IfA Registered Organisation (RO) status (see Annex H).

5.6.13 It is reported that high numbers of organisations across the profession support their staff undertaking CPD, however it appears this widespread support does not necessarily transmit into the graphics environment and is even less likely to appear in the graphics arena among ROs.

5.6.14 Whilst figures are not available for the sector as a whole, fewer than half of organisations -- including ROs -- with in-house illustration teams, link CPD with career development (Table 5.3).

5.6.15 Nearly three-quarters of organisations across the sector ring-fence CPD budgets, but again, this policy does not necessarily filter into the graphics environment, and is even less likely to be adopted by ROs (Table 5.4).

5.6.16 Finally, close to two-thirds of organisations carry out a performance audit among all or sections of their staff, but there is a fundamental failure for organisations to assess the skills base of their specialist in-house illustrators – a failure that is deeper among ROs (Table 5.5).

<i>Table 5.2</i>	Support access to CPD	<i>*Sector-wide organisations</i>	<i>In-house illustration teams (All)</i>	<i>In-house illustration teams (ROs)</i>
	Yes	82%	63%	58%
	No	14%	37%	42%

In a department of one there is no prospect for promotion, management experience, or ever moving on. One is expected to remain at the same level throughout one's career.

VIA 2010 Snapshot Survey, Feedback

Table 5.3	Linking CPD and career development	*Sector-wide organisations	In-house illustration teams (All)	In-house illustration teams (ROs)
	Yes	-	42%	42%
	No	-	58%	58%

Table 5.4	Ring-fence CPD budget	*Sector-wide organisations	In-house illustration teams (All)	In-house illustration teams (ROs)
	Yes	70%	53%	42%
	No	28%	47%	58%

Table 5.5	Undertake performance audit	*Sector-wide organisations	In-house illustration teams (All)	In-house illustration teams (ROs)
	Yes	60%	16%	8%
	No	36%	84%	92%

Source: *Aitchison & Edwards 2008:102; 2010 VIA Snapshot Survey; 2009-10 VIA Graphics Office Managers Survey

5.6.17 Although there is an obligation for ROs to support CPD opportunities among their employees, at best their performance in relation to specialist illustrators matches those organisations who do not enjoy RO status; more frequently ROs fall below the standards of their non-RO counterparts. See Recommendation 10.

6 Conclusions and Recommendations

6.1 *Professional Standards*

6.1.1 Since the 1990s an emerging professional archaeology sector sought to accommodate an increasing diversity of job specialisations based on a range of technical proficiencies; the discipline of archaeology expanded out from core project management and field archaeology skills, although echoes emanating from the source remain detectable today. Consequently, over the past 20 years tiers of specialist practitioners were defined and their particular skill-sets acknowledged within the profession, skills that had previously been considered secondary to the core practices of archaeology.

6.1.2 Against this background, archaeological illustrators have established themselves as a community of specialists with their own professional association and, more recently, their own special interest group within the IfA. Nevertheless, their professional skills and duties are poorly defined within the NOS document.

Recommendation 1

English Heritage working with all related stakeholders initiate a process to map the roles and skills of those undertaking imaging and graphics duties within the archaeology and heritage sector, toward the development of occupational standards for specialist and non-specialist image producers. See Sections 2.2.6; 2.4.2; 2.7.3

6.1.3 Specialist illustrators are subject to a complex series of responsibilities when contributing to the research and dissemination phases of a project. The critical evaluation of authority claims inherent in visual materials arising from archaeological investigations are poorly reflected in current peer review mechanisms. In short, there is no imperative for specialist illustrators to formally substantiate the visual work they are commissioned to undertake as an individual or when working as a part of a multi-disciplinary team.

6.1.4 As a community of specialists producing visual materials, there are no guidelines to make illustrators aware of the ethical issues that may arise during the research process, to make practitioners aware of their ethical responsibilities, or to establish a semantic framework for documenting research sources that underpin the production of visual materials.

Recommendation 2

English Heritage working with all related stakeholders develop a declaration of ethical principles and guidelines for imaging and graphics professionals working in the archaeology and heritage sector. See Sections 2.7.3; 2.7.7; 2.10.4

6.2 *Specialist Sector Intelligence*

6.2.1 Over the past decade numerous studies have focused on the roles and activities undertaken by specialists working in the archaeology and heritage sector which have suggested specific issues and needs associated with specialist illustrators -- although their conclusions and recommendations were based on relatively low level, disparate samples.

6.2.2 The VIA project has demonstrated the value of targeting research, identifying an otherwise 'invisible' community of specialists, and encouraging potential respondents to 'buy-in' to its research aims and objectives.

Recommendation 3

English Heritage working with all related stakeholders extend the VIA Snapshot Survey to include all employed and self-employed imaging and graphics professionals operating in the archaeology and heritage sector across the UK. Repeat survey every five years. See Sections 2.2.10; 2.3.4; 2.5.7; 2.7.3

6.2.3 The VIA Graphics Office Managers' Survey has, for the first time, surveyed senior imaging professionals. Survey results confirm senior illustration staff display deep levels of on-going experience that has been accumulated over a period of profound change in the illustration and graphics environment. Their collective long-range perspective provides a vital source of sector intelligence relating to changes in working practices, skills deficits, training, and likely future trends.

6.2.4 Nevertheless, there appears to be a widespread perception among senior illustration staff that technology is *the* driver of past and future change, the consequences of which may obscure traditional skills deficits and fossilize the discipline's visual conventions.

Recommendation 4

English Heritage working with all related stakeholders to plan a series of workshops bringing together senior imaging professionals to explore key themes and issues facing the specialist sector, meeting foresight and sector intelligence themes of the National Heritage Protection Plan. See Sections 2.3.4; 2.4.2; 2.4.4; 2.5.5; 2.7.3

6.3 *Entry-level Specialist Illustrators*

6.3.1 The specialist illustration sector, in common with the archaeology sector as a whole, employs a high proportion of graduates, however as first degrees are rarely vocationally orientated their value as a proxy for task-specific skills is limited.

- 93% of specialist illustrators in their 20s have a first degree or higher.

6.3.2 Specialist illustrators are expected to arrive into the profession as archaeology graduates. Nevertheless, few degree courses offer graduates the opportunity to gain illustration skills, indeed QAA benchmarking explicitly

prioritises textual development whilst ignoring the importance of attuning graduates to the profession's visual demands.

- Of the 220 archaeology degree courses available in England, illustration modules are available on nine courses delivered at two HEIs.

6.3.3 Specialist illustrators work in collaboration as part of a multi-disciplinary team in the production of visual materials. Although archaeological practitioners are expected to commission and validate images, they are provided with few, if any, opportunities to develop skills of visual literacy at university or subsequently throughout their careers.

Recommendation 5

English Heritage working with Standing Committee for Archaeology and the Higher Education Funding Council along with all related stakeholders work towards reviewing the QAA subject benchmark statement for archaeology to highlight the necessity for adequate training in visual literacy. See Section 2.8.3

As mentoring and coaching both usually involve one-to-one development sessions, it is easy to confuse the two. In fact, the two approaches have different goals, relationships and time frames. Mentors are friendly long-term career advisors with experience of the mentee's industry or company. Coaches, on the other hand, are impartial guides to improved performance – they help clients move towards solutions to specific issues, often within a set timeframe, and then leave.

Kevin McCullagh,
UK Design Skills Alliance

6.3.4 Informal, on-the-job mentoring of entry-level employees through the transfer of knowledge and skills under the supervision of senior staff, is an employer's primary response to ensuring entry-level employees have sufficient specialist skills to meet their professional responsibilities.

6.3.5 Organisation size and size of in-house graphics teams are contributing factors in the effective provision of mentoring opportunities for entry-level staff.

- Small organisations -- on average in-house teams are small, include a high percentage of entry-level employees and experienced senior staff, but employees more likely to work in isolation, teams comprise a high percentage of part-time staff;
- Medium size organisations -- on average in-house teams are large, include high numbers of entry-level employees working alongside experienced staff, teams comprise a high proportion of full-time staff;
- Large organisations -- on average in-house teams are small, employ few entry-level staff but high numbers of experienced senior staff, teams comprise a high proportion of full-time staff.

Recommendation 6

English Heritage working with all related stakeholders establish partnerships to jointly develop inter-organisational mechanisms for the strategic delivery of knowledge and skills transfer relating to the production of visual materials appropriate to entry-level staff. See section 2.4.4

6.5 **Continuing Professional Development**

The workforce has increasing demands on its time and the development of specialist skills and knowledge is not always prioritised, or valued as highly as developing skills in other areas. It is also the case that there is little emphasis on applied learning in specialist education courses – the emphasis is on the acquisition, rather than both the acquisition and application, of knowledge.

Creative & Cultural Skills
2008

Our current employment and skills systems are often seen by users as complex, difficult to understand and hard to navigate. Whilst many of the policy initiatives and reforms developed in recent years have been designed to make the systems work better, to be more responsive, to be more ‘demand-led’, too often the overall effect has been to complicate rather than to simplify.

UK Commission for
Employment and Skills
2009

6.5.1 CPD as a mechanism is acknowledged to be widely misunderstood by large sections of the IfA membership – CPD and workplace training are commonly conflated as one and the same by individuals and organisations despite on-going promotion of CPD by the IfA.

6.5.2 Although agreement on what constitutes CPD is poorly aligned across the IfA’s membership, that situation is likely to be compounded in the specialist illustration sector as only a minority of illustrators are IfA members.

- 22% of specialist illustrators are members of the IfA.

Recommendation 7

IfA Graphic Archaeology Group working in partnership with related stakeholders actively promote the IfA’s CPD scheme as a model of best practice to all individuals and organisations operating in the specialist sector and to non-specialists producing visual materials. This recommendation acknowledges Recommendation 21 and 29 of the Southport Report. See Section 2.4.4

6.5.3 The provision of training across the specialist illustration sector is at once complex and straightforward. As indicated above there is widespread confusion as to the nature of CPD, therefore mapping the provision of both CPD and unstructured training is a highly complex task, especially through the questionnaire method which relies on a respondent for its completion. And yet it seems that the form and delivery of training provision is constrained among specialist illustrators.

- 78% of in-house illustration teams only access informal training;
- 60% of in-house illustration teams only access training on-the-job;

6.5.4 The dominance of informal on-the-job training suggests that training provision for specialist illustrators is predominantly task-specific and employer-facing. An assumption that may be supported by an almost complete lack of skills-audits undertaken by employers among their in-house illustration teams to inform training policy.

- 16% of organisations with in-house illustration teams had undertaken a skills-audit of their specialist illustration staff – one carried out as part of a redundancy process, the others too long ago to be of current value.

6.5.5 In contrast to the wider profession, only a minority of specialist illustrators enjoy access to formal, off-the-job training.

- 9% of specialist illustrators access formal off-the-job training, compared to 71% across all posts.

Recommendation 8

English Heritage working with all related stakeholders undertake a detailed audit of CPD and training provision among specialist illustrators. See Sections 2.4.2; 2.4.9

6.5.6 IfA Registered Organisations (RO) with in-house illustration teams perform, at best, on a par with non-RO organisations also employing in-house illustration teams in the provision and support of training to specialist illustration staff; however, too often these ROs fall below the standard set by non-RO organisations – standards which typically fall well below those recorded across the profession as a whole (see Tables 6.2 – 6.5).

Recommendation 9

IfA Graphic Archaeology Group actively lobby to ensure that organisations enjoying RO status are providing appropriate support for the provision of CPD and training among specialist illustration staff. See section 2.5.5

6.4 Non-specialist Illustrators

6.4.1 The production of visual materials by non-specialist staff is widespread across the profession. Organisations typically require staff to produce visual materials with limited formal know-how due to various financial constraints or due to a corporate policy for all staff to multi-task.

- Limited skills – organisations with an employee displaying some knowledge of software packages or displaying some drawing skills;
- Multi-tasking – organisations whose staff are expected to undertake a wide variety of roles.

6.4.2 Non-specialist staff independently generate images in organisations also employing specialist illustration staff but are typically external to quality control systems employed within in-house illustration teams.

Recommendation 10

Building on the work currently undertaken by the VIA project, the IfA Graphic Archaeology Group to identify and survey non-specialist illustrators. See Section 2.6.3; 5.6.17

6.6 Publication and Dissemination

6.6.1 Monographs, interim reports and grey literature remain the principal depository for visual materials produced by in-house specialist illustrators.

- 75% of images produced by in-house illustrators are destined for inclusion in monographs, interim reports and grey literature;
- 11% of images produced by in-house illustrators are destined for online dissemination;

6.6.2 Monographs represent the orthodox model of publication and remain the primary destination for images produced by in-house specialist illustrators. Monographs are subject to vetting; nevertheless while visual materials substantially contribute to a publication's knowledge claims the images themselves are rarely subject to academic validation – except in aesthetic terms – as there is no semantic framework in place to articulate the circumstances or lineage of an image's production.

- 36% of images produced by in-house illustrators are destined for inclusion in monographs.

6.6.2 Since the implementation of PPG16 the proliferation of and accessibility to grey literature has been well documented. OASIS provides a depository for almost 12,000 digitised grey literature reports from England and Scotland although they are, by their nature, variable as grey literature fulfills planning conditions defined and validated by individual curators. A high percentage of visual materials produced by specialist in-house illustrators are included in grey literature.

- 27% of images produced by in-house illustrators are destined for inclusion in grey literature.

6.6.3 A large percentage of images produced by non-specialist illustrators are destined for inclusion in grey literature.

- at least 44% of organisations employing non-specialist illustrators produce visual materials for inclusion in grey literature.

6.6.4 The PUNS project highlighted the potential of multi-media approaches to dissemination as alternatives to the orthodox, paper-based, linear model of publication. Ten years on, and concerns contained in the report over unequal access to the internet and the relative novelty of emerging digital technologies of transmission, have now passed us by.

6.6.5 The textual focus of PUNS failed to acknowledge past and current contributions of visual materials to knowledge production, the role of images at their point of reception, and the multi-layered potential for images to communicate information utilising what have become ubiquitous technologies of production and transmission.

' . . . reports will only improve in content, structure and articulation if the editorial aspects of their production are considered much earlier... translat(ing) into better-written, better-focused publications.'
Jones *et al* 2003:29

Recommendation 11

English Heritage working in partnership with all related stakeholders commission an integrated review of publication and dissemination practice across the heritage sector and in comparable professions. To horizon scan dissemination methods and technologies, identifying likely key drivers and conditions of change in publication policy. This recommendation builds on Recommendation 17 of the Southport Report. See Section 2.9.6

Skillset is a strategic organisation operating across three main areas: 1) to research where the skills gaps and shortages exist within the creative media industries; 2) to inform and influence training provision and qualification development for the competitive benefit of the creative media industries; 3) to ensure those entering the industry are well prepared by realistic careers information and that those in the industry are able to update and develop their skills throughout their careers.

www.skillset.org

6.7 Centre of Excellence

6.7.1 Over its period of operation, the VIA project has identified a large and diverse community of international researchers and practitioners with a deep commitment to exploring the production, deployment and impact of visual materials in archaeology (Table 6.1). Their presentation of on-going research projects at the VIA's annual workshops and conference; their contribution to the VIA's online resources; their enthusiastic engagement in the VIA's sector-wide intelligence gathering activities; and their international, inter-disciplinary backgrounds have all combined to form the VIA's uniquely inclusive *modus operandi*.

Region	2008-10 w/shops	2011 conference	research showcase	surveys
UK	41	23	31	52
Europe	9	16	9	-
Americas	12	19	9	-
Asia	1	-	-	-
Africa	3	1	-	-
Australia/Oceania	1	1	2	-
TOTAL	67	60	51	52

Table 6.1: Geographic spread of contributors to the VIA project

VIA Website stats			
Year	site visits	page views	page visits
2008	1152	7757	6.73
2009	3391	16,356	4.82
2010	4145	21,660	5.23
2011	6462	28,488	4.41
TOTAL	15,150	74,261	5.3

Table 6.2 VIA website stats: 2008-2011

6.7.2 The VIA project has established a space in which theorists and practitioners have productively worked together to define and explore a range of issues which had previously been the preserve of one or other community. Barriers have dissolved and new accords established across the two communities resulting in a demonstrably fruitful engagement in many aspects of the VIA project's work.

6.7.3 The research and practitioner communities in general and the project management team in particular, have made substantial contributions to the

VIA project providing a unique pool of individuals variously attuned to visually-orientated modes of archaeological theory and practice.

Recommendation 12

English Heritage working in partnership with the VIA project management team and all related stakeholders establish a Centre of Excellence dedicated to promoting new research, standards and best practice. To appoint a steering committee representing key stakeholders from across the archaeology profession and comparable professions. To strategically implement this report's recommendations and to define future research. To use the VIA project's online resources as a basis of a Centre of Excellence website to disseminate results of its work. See Section 2.11.3

6.8 *Dissemination of VIA Project's Activities*

Assessing the Visual Representation of Data in Archaeology: Project Design, Section 4

However, following on from the conference, it is proposed that the conference proceedings be written up over a period of 12-18 months in preparation for publication. And, to reflect the integrated nature of this proposed research project, a full project report of academic calibre will also be completed in parallel with the conference proceedings for online publication (including possible paper publication elements). Further, the full Strategic Report will be produced, published on-line and feature a possible paper summary. This process will be subject to a separate funding application.

Recommendation 13

English Heritage to implement Section 4: *Post-project Publication*, VIA Project Design. See Section 1.5.4

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Annex B: **VIA Annual Workshops**

B1.1 Over the project's period of operation, the three VIA Workshops attracted a total of sixty-seven researchers and practitioners who materially contributed to more than forty-eight hours of dialogue around key conceptual issues initiated by a total of 58 papers. When one takes into account delegates who attended the workshops and contributed to the debates but did not present a paper, workshop activists rose to more than 100 established or emerging specialists, evolving into an embryonic network of interdisciplinary theoreticians and practitioners.

Annual VIA Workshops: Geographic spread of contributors

<i>Region</i>	<i>Number of contributors presenting papers</i>			
	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>TOTAL</i>
UK	14	12	15	41
Europe	5	2	2	9
N. America	6	3	3	12
Asia	0	0	1	1
Africa	0	1	2	3
Australia/Oceania	1	0	0	1
TOTAL	26	18	23	67

Table B1.1: VIA Workshops 2008-2010, geographic spread of contributors

B1.2 Whilst academic papers addressed session themes, the resulting workshop discussions have repeatedly and persistently gravitated around key concerns.

B1.3 Participants at the 2008 workshop commented on the surprising lack of critical work relating to digital technologies and their consequent impacts on visualisation in archaeology. Whilst it was acknowledged that the advent of digital technologies had generated a considerable body of theoretical and critical work across academic literature, there seemed little awareness of this wider academic debate within archaeology. Indeed, this apparently provincial approach may have been a contributing factor to the paucity of critical research submitted to the 2009 workshop sessions dealing with these issues; especially given the ubiquitous presence of technology and its attendant impact on visualising practices in archaeology.

B1.4 In contrast, the 2009 workshop attracted a prodigious over-subscription of papers presenting current work, with a strong project-base in the form of practical case studies. At the heart of the digital technology debate lay the role of the specialist illustrator in archaeology. Although image-generating archaeologists have been, and continue to be, central to the practice of archaeology (often alongside imaging specialists), the flourishing of new, endlessly upgraded, novel and multifunctional digital 'solutions' to

imaging requirements have consequently precipitated a corresponding decline in competencies and skills. Workshop participants discussed the possibilities and effects of replacing skilled specialist illustrators with partially skilled non-specialists.

B1.5 Alongside a proliferation of hardwares, softwares and digital outputs and a resultant skills deficit, there nevertheless appears to be an ongoing, if ad hoc, pressure to further exploit existing and emerging digital technologies. What, then, do specialist illustrators offer the discipline that non-specialists are unable to deliver? Or, put simply, can archaeologists trained in general procedures replicate the work of specialist image producers?

B1.6 The pedagogic impact of higher education on archaeology undergraduates in the proficient use of analogue and digital imaging techniques was widely debated, particularly in light of the QAA's benchmark statement for Level 6 degrees in archaeology, which all but ignore standards relating to visual competency as subject-specific skills. Here the debate widened to one of general practitioners' proficiency in actively confronting and interpreting visual materials, and of the role of higher education in initiating graduates in the visual culture of the discipline. It was suggested that general practitioners with low skills levels associated with comprehending, interpreting and managing visual resources in a work environment where non-specialist image production was the norm, would consequently have little or no appreciation of the gradual decline in visual specialists and their unique skill-sets.

B1.7 Given the concerns outlined above, debate naturally turned to issues grounded in the ethics of image production and circulation. Whilst questions surrounding the proficient and, therefore, responsible production of images by skilled and non-skilled practitioners had been legitimately aired, it was noted how workshop participants' discussion had primarily focused on 'production' in the life-cycle of images; whereas issues relating to accountability in the 'circulation' of those images across different audiences – when their effect is arguably most profound – had, importantly, attracted little or no direct research.

B1.8 For extended summaries of debates and reflective commentary on the format, range and consequences of the Workshops, see the 2008, 2009 and 2010 VIA Workshop Reports posted at www.viarch.org.uk/content/2010-media.asp.

Annex C: **VIA Research Showcase**

C1.1 The online VIA Research Showcase serves as a focal point for researchers from around the world whose work centres on the historic deployment of images in archaeology, and highlights contemporary research projects arising from the innovative visualisation of data resulting from archaeological investigations.

C1.2 Collaborations between archaeologists and artists are well represented in the case studies, providing fresh approaches to the challenges of disseminating results from archaeological research.

C1.3 As of March 2011 a total of thirty-six research case studies representing sixty researchers featured on the VIA Research Showcase. Overall, the case studies represent the work of sixty researchers, primarily from the UK, Europe and North America.

Geographic spread of contributors	
<i>Region</i>	<i>Number of contributors</i>
UK	23
Europe	16
N. America	19
Africa	1
Australia/Oceania	1
TOTAL	60

Table C1.1 Online VIA Research Showcase, geographic spread of contributors

C1.4 The Research Summary's search page has registered a total of 2384 visits.

Visits to the online VIA Research Showcase	
<i>Year</i>	<i>Page visits</i>
2008	747
2009	3153
2010	3514
2011	1538
TOTAL	8205

Table C1.2 Online VIA Research Showcase, visits 2008-2011

C1.5 Some of the featured case studies complement papers delivered by researchers and practitioners at the VIA project’s annual workshops; others were received from academics and practitioners who had not otherwise engaged directly with the project’s events, but who were aware of its mission.

C1.6 With few exceptions, all featured case studies result from postgraduate research. Each of the thirty-six case studies fall broadly under one of three visual research themes; namely, historic-based research, contemporary project-based research, and art-based research:

VIA Research Showcase themes	
<i>Research theme</i>	<i>Number of projects</i>
Contemporary	16
Historic	11
Art/Archaeology	9
TOTAL	36

Table C1.3 Online VIA Research Showcase, research themes

C1.7 Of the sixteen case studies based on contemporary research themes, six incorporate social media in delivery of their research results and each one carries an emphasis on outreach and community archaeology. Many case studies investigate specific issues centred on the production of virtual reality models, their utility and with an eye towards their impact as research tools. A number of projects develop multi-sensory approaches in representing the past by bringing together and combining an array of multi-media traces. Finally, case studies based on scanning technologies offer project-specific field methodologies in the recording and interpretation of data, and in reconstructing the past.

C1.8 Each of the case studies with an historic emphasis considers the 19th-20th century development of archaeology in light of visual material specific to that time. Often the development of new imaging technologies, and the development of archaeology as a profession/discipline raise interesting issues around that seemingly tight relationship.

C1.9 Questions are also explored concerning archaeological narratives which can explain the past in light of the socio-cultural contexts of their construction; indeed, we are asked to consider if images create a ‘zone’ in which new narratives may arise – not just in the past but in contemporary practice.

C1.10 For those case studies which connect art and archaeology, with often challenging and surprising results, the research offers fresh approaches to representing archaeological knowledge in formats and styles that promise to engage the audience – public and professional -- in new and meaningful ways.

C1.11 Other projects seek to tease out an embodied approach to our understanding of ‘place’ and ‘site’. Still other case studies set out to understand how artistic images of a site can combine and substantially contribute to a meaning of that site. Given the ubiquitous nature of digital

technologies, it is notable that a number of case studies explicitly or implicitly question contemporary modes of production, by focusing on traditional drafting methods and their contribution to the creative process.

Annex D: **VIA Online Bibliography**

D1.1 The online searchable bibliographic listing provides users with a comprehensive sample of references concerning publications relating to the visualisation of data. The listings span the literature -- from writings on the visual representation of archaeological data to visualisation in the wider fields of the sciences, social sciences and arts -- as a means for archaeological practitioners, academics, students and the public to learn from and build upon cross-disciplinary experience.

D1.2 The bibliography aimed specifically to include publications from the fields of archaeology, geography, geology, palaeontology, sociology, history of science, philosophy of science, museum studies, cultural studies, visual studies, and art history.

D1.3 As of March 2011, the **Online Searchable Bibliography** numbered in excess of 500 citations. The bibliography's search page registered a total of 479 visits, each visit undertaking an average of 4.2 search requests:

Visits to online VIA Bibliography	
<i>Year</i>	<i>Page visits</i>
2008	1892
2009	2876
2010	2995
2011	1847
TOTAL	9610

Table D1.1 Online VIA Bibliography, visits 2008-2011

D1.4 Visits to the facility have grown year-on-year as the bibliography has expanded and as the VIA project has reached out to a greater number of researchers and academics actively working in the field.

D1.5 Keyword searches identify the range and depth of the bibliography across the arts and humanities and science communities.

VIA Bibliography search results, by keyword	
<i>Keyword</i>	<i>Number of search results</i>
Art	201
Archaeology	170
Representation	96
Photograph	88
Science	80
Drawing	41

Table D1.2 Online VIA Bibliography, search results by keyword

D1.6 Perhaps the most telling aspect of the bibliographic entries, however, relates directly to the VIA project's rationale. Archaeology, in line with other disciplines, has increasingly turned its inquiring eye to the production, deployment and role of visuals within the field – a search of papers by publication date featured in the bibliography provides evidence of the upsurge in visuality-related studies.

VIA Bibliography citations, by date

<i>Date range</i>	<i>Number of citations</i>
1970s	16
1980s	26
1990s	129
2000s	314

Table D1.3 Online VIA Bibliography, citations by date

Annex E: **VIA 2011 Conference**

E.1 Contributors from across disciplines were invited to propose sessions that build on themes exposed in our series of annual workshops and in our online research showcase. These included, but were not limited to:

- visualisation as research
- visual codes/languages of communication
- ethics and responsibility in visual practice
- audience reception of the visual
- non-specialist engagements with visualisation
- visual economies
- histories of visualisation
- visual literacy/competencies

E.2 We encourage innovative formats of presentation and session administration that push the boundaries on typical conference proceedings. We were keen to see participation from professional visualisers, practitioners, commercial industry, students and scholars across the sciences, humanities and social sciences. The event was live-streamed and contributions were required to be adaptable for publication.

2011 VIA Conference: Geographic spread of contributors	
<i>Region</i>	<i>Number of contributors presenting papers</i>
UK	31
Europe	9
N/S America	9
Asia	0
Africa	0
Australia/Oceania	2
TOTAL	51

Table E1.1: 2011 VIA Conference, geographic spread of contributors

E1.3 To view the conference programme, see www.viarch.org.uk/2011-programme.asp

E1.4 Publication of the conference proceedings will be subject to a grant application.

Annex F: **2009-10 Telephone Survey, VIA 2010 Snapshot Survey and Graphics Office Manager Survey**

F.1 VIA 2009/2010 Telephone Survey

F1.1 Potential respondents for the VIA Snapshot Survey were identified from an initial comprehensive list of archaeological and heritage organisations, numbering in excess of 500, compiled principally from the IfA 2009 Members Handbook. This initial list was refined to some 280 organisations through the exclusion of those organisations not directly associated with archaeology and through the setting aside of most local authority planning archaeologists and, with few exceptions, museums.

F1.2 Across the latter half of 2009 into early 2010, a telephone survey of the resulting contact list was undertaken to establish which organisations had in-house graphics capabilities, and to record respondents' details in preparation for the snapshot survey.

F1.3 Although the telephone survey was primarily undertaken to identify all in-house graphics offices operating across England, the survey collected core information from over 100 organisations, with an emphasis on who, if anyone, created images within each organisation, the type of graphics produced, and their means of production.

F1.4 Anonymity was assured throughout the period of study and in its reporting.

F.2 VIA 2010 Snapshot Survey

F2.1 In Spring 2010, the VIA project undertook an audit of in-house illustration and graphics teams working in the archaeology sector in England through a snapshot survey. The aim of the survey was to profile those organisations actively operating within the archaeology sector with in-house graphics teams, and to carry out a fine-grained audit of illustration and graphics professionals and the work they undertake. A questionnaire was structured to capture information around four core areas, namely, the parent organisation, the illustrators, the products, and professional standards.

F2.2 At an early stage the survey questionnaire was piloted among a range of organisations and accordingly revised prior to its circulation on the survey date of 15 April 2010. The questionnaire gathered detailed information relating to each in-house graphics team's activities undertaken on the survey date. Following the telephone survey, forty-one organisations were identified as having in-house graphics capabilities comprising one or more full-/part-time specialist illustration employees. Thirty-eight teams agreed to undertake the survey, however this final number was soon reduced to thirty-seven as a result of the economic environment.

F2.3 Of the final thirty-seven teams, two national organisations boasted multiple in-house illustration teams, each working more or less independently within their parent organisation. For the purpose of this survey, those multiple

teams were regarded as individual entities, thereby boosting the snapshot survey sample to a total of forty-one in-house illustration teams.

F2.4 A single respondent was identified from each in-house graphics team who agreed to be responsible for the completion and return of their questionnaire. Of the 41 questionnaires posted, 33 (80%) were successfully completed and returned.

F2.5 Anonymity was assured throughout the period of study and in its reporting.

F.3 ***VIA Graphics Office Managers Survey***

F3.1 Building on the Snapshot Survey and with particular emphasis on the delivery, role and attitudes to training provision, the VIA project undertook a structured interview survey of in-house graphics office managers and senior illustrators. The survey also sought to explore the perceptions of senior graphics staff regarding the position of imaging within archaeology, and to invite comment on anticipated future trends within the work environment.

F3.2 Nineteen senior graphics office staff agreed to undertake the interview survey, each representing a different in-house graphics team. The structured interviews concluded with an unstructured session when interviewees could further expand on themes within the questionnaire.

F3.3 Anonymity was assured throughout the period of study and in its reporting.

Annex G: **Previous Work**

G1.1 Mapping the breadth of functional roles across the profession, benchmarking the skills required to effectively undertake those roles, and linking structured training to professional validation have each taken an increasingly central role in marking archaeology as a profession. This process has developed alongside a series of projects designed to gather labour market intelligence. Encompassing the whole sector or targeting specialist areas on a national or regional basis, the projects have, from the mid-1970s, charted a profession in transition.

G1.2 The following project summaries represent key examples from a body of work which aims to place the current provision of training and CPD for professional illustrators -- 1) in context to the wider profession; 2) in context to specialist sectors; and, 3) in relation to the development of new training strategies.

G2 ***Labour Market Intelligence***

G2.1 Sector-wide surveys expanded in range and in representation mirroring an increasing shift toward the sector's professionalisation. Spanning at least thirty years, the collecting of labour market intelligence developed through a series of Rescue surveys carried out among those curators and contractors actively engaged in Rescue archaeology (Dew 1976; Dennis 1979; Plouviez 1988; Spoerry 1992; Spoerry 1997) through to the more recent IfA's wide-ranging Profiling the Profession project (Aitchison 1999; Aitchison & Edwards 2003; Aitchison & Edwards 2008). Early surveys questioned the necessity for archaeology's engagement with commercial forces post-PPG16 and its move towards professionalisation (Spoerry 1997), yet a few years later mapping the extent and make-up of the profession became a central concern. In 2003 the surveys started collecting information relating to training provision, presumably following the IfA's CPD scheme launched in 2000.

G2.2 *Profiling the Profession 2002-03* (Aitchison & Edwards 2003)

The project provides comparative data designed to collect labour market information on a five year cycle -- although the first survey (Aitchison 1999) did not request information relating to training or CPD. Almost all organisations (93%) undertaking the survey stated they identified training needs for all or some of their staff, and 89% of organisations reporting they encouraged staff to undertake CPD. High numbers of organisations (78%) claimed they had a training budget and almost three-quarters (71%) had established formal training plans. The survey identified 'formal' training -- 85% in-job and 92% off-job -- as the most popular approach to skills development. Almost three-quarters of organisations offered 'informal' training -- 72% in-job and 71% off-job. At an individual level only 44% of archaeologists considered there was sufficient opportunities for CPD.

G2.3 *Profiling the Profession 2007-08* (Aitchison & Edwards 2008)

This survey, the third undertaken by the project, reported equally high numbers of organisations identifying training needs for their staff, yet the

survey charted an overall decline in training provision. 82% of organisations (89% 2002/3) claimed they encouraged staff to undertake CPD, 70% (78% 2002/3) reported they had a training budget, and 52% (71% 2002/3) reported they had formal training plans. Respondents reported a decline in the provision of 'formal' training – 65% in-job (85% 2002/3) and 71% off-job (92% 2002/3). 'Informal' training provision marked similar rates of shrinkage – 55% in-job (72% 2002/3) and 55% off-job (71% 2002/3). The report provides a cautionary note to these figures suggesting that organisations' commitment to training apparently continued to be strong -- the decline in training provision possibly reflecting a growing tendency to target training.

G3 Specialist Sector

G3.1 Projects providing intelligence on specialist sectors in archaeology have consistently highlighted diversity of training provision across the profession and, recently, wide variability in accessing training by different specialist groups (Maloney 1998; Hodgson 2008; Aitchison 2011). Sector-wide intelligence has charted the profession across a time of profound change, covering both the funding and structure of archaeology. However research specifically directed toward the specialist sector has emerged at a time of widening separation between professional roles (Darvill 1999), and the codification of activities aimed at defining those roles (Carter & Robertson 2002).

G3.2 Practitioner Survey 1997 (Maloney 1998)

Archaeology practitioners were recognised as a poorly represented body within the IFA; this early survey sought to give one set of specialists a voice. The requirement for training, as a vehicle for career development, overwhelmingly topped respondents' feedback, alongside a need for the IFA to persuade commercial units to invest sufficient time and money required to undertake training -- tellingly, less than half of respondents chose not to reply when asked if their employer would fund training courses for staff. The report closed by hoping that future training provision would meet the needs of employers and employees, although the question of how the IFA might encourage a higher priority towards training issues among employers was left unanswered.

G3.3 IfA Special Interest Group for Illustration & Survey: 2008 Survey (Hodgson 2008)

Although covering many issues relating to specialist practitioners working in illustration and survey, the survey undertaken by the IfA's special interest group touched on issues relating to career development. When asked if respondents wanted some form of training, 78% replied in the affirmative -- the questionnaire making no explicit distinction between unstructured training and CPD.

G3.4 Survey of Archaeological Specialists 2010-11 (Aitchison 2011)

This project gathered information from a wide range of specialists working across the sector with particular attention paid to specific working practices in light of the prevailing economic climate. The survey recorded data from thirty specialist respondents representing archaeological illustration, who collectively stated they provided some ninety-nine distinct specialist illustration and

graphics tasks. Whilst the majority of respondents across all specialisms (63%) stated that access to ongoing CPD was very or quite difficult, the report noted that of all specialists represented in the survey, illustrators (71%) reported the most difficulty in accessing ongoing CPD.

G4 *Training Provision*

G4.1 From the late 1990s, sector-wide surveys exposed high variability in training provision arising from poorly developed training structures. In response to this cumulative body of evidence, a training framework was established to support career development through a programme of planned and demonstrable CPD made available to all levels of the profession, thereby enhancing the profession's reputation (Fraser 1991; Chitty 1999; ATF 2003). Further work recorded the advantages and weaknesses of the IfA's training framework for future refinement, and to effectively communicate training policy to its membership (Aitchison 2008; Aitchison & Heyworth 2008; Aitchison & Geary 2008; Aitchison & White 2008; Collins 2010).

G4.2 *Professional Training for Archaeologists* (Fraser 1991)

An IFA commissioned survey designed to identify and assess the need for training, the structure of that training, and the content of future training courses required by professional archaeologists. High levels of demand, especially for 1-2 day courses, were evident although few respondents felt enough time was allocated by employers to undertake adequate training, indeed, few employers were reported having any training policy in place. The report stated a principal barrier to the development of training courses was the low prices willing to be paid from all levels of the profession, although a large proportion (89%) of the workforce were prepared to pay for all or some of their costs – virtually all respondents (99%) felt employers should contribute to training costs.

G4.3 *Training in Professional Archaeology: A Preliminary Review* (Chitty 1999)

Research undertaken for the Archaeology Training Forum which sought to outline the current state of training provision, collate perceived needs, and formulate recommendations for an integrated approach to future training provision. 54% of respondents reported their employers had no training plan or that they were unaware of any such plan, yet 77% stated they did undertake some form of in-house training. Archaeologists were less than satisfied with access to training due to poorly developed employer provision and lack of resources -- 73% of respondents reported they accessed training and updated skills in their own time. Few respondents indicated they had developed plans to identify their training needs, and there was little evidence of employers and employees working together to identify mutually beneficial CPD provision -- skills audits, despite their relative low cost, were not implemented in the workplace. Although the beginnings of basic, wide-spread training provision was identified, such CPD as existed -- intended to maintain and improve standards across the profession -- was described as weak, unstructured and poorly aligned to the sector's needs. Training was largely generic, concentrating on transferable skills rather than relating to specific professional roles and the core competencies required by those roles to undertake work in a professional manner. The report identified the development of occupational standards as a driver for training standards and provision, professional qualifications and career progression.

G4.4 *A Vision for Training and Career Development in Archaeology*
(Aitchison 2008)

The report provides a strategic assessment of current training provision and presents recommendations for future training and career development intending to, in part, address uncertainty surrounding the definition and deployment of CPD in the profession. Building on results from Aitchison (2003), all formats of training provision were widely reported across the profession, yet a lack of well defined routes for career progression resulted in an overall lack of opportunities leading to a reported high loss of entry-level staff. Whilst CPD is now obligatory for IfA members, the report nevertheless found that CPD was widely misunderstood by large sections of the membership. Similarly, five years after the introduction of National Occupational Standards, the sector was reported to be largely unaware of their existence and for their potential to inform accredited CPD programmes, particularly among specialists.

Annex H: **Continuing Professional Development (CPD)**

H1 **Overview**

H1.1 A high demand for short training courses from archaeology practitioners -- relating directly to career development -- had been apparent since the introduction of PPG16 (Fraser 1991: 244). Expanding on these demands, CPD was later defined by the IFA as the voluntary undertaking of a wide range of structured activities by practitioners based on the planning and recording of their training, and thereby providing a formal demonstration of competence (IFA 1993; Wood 1994:410-1). Nevertheless, the degree to which employees both plan and record their professional training was recognised by the profession as, at best, variable.

H1.2 Following a review of training provision, the IFA undertook a 'proactive rethink' of approaches to professional training for archaeologists. A framework was proposed which sought to differentiate skills across the profession, to structure training provision at key moments in a practitioner's career, and to link CPD to IFA membership validation procedures (Collis & Hinton 1998). This new training agenda coincided with a re-constituted IFA Career Development & Training Committee (Collis 1997; Collis 1998), establishment of the Archaeology Training Forum (ATF), and an emerging flurry of sector-wide surveys (Hardy 1997, Moloney 1998, Chitty 1999, Aitchison 1999, Aitchison 2000), building a body of evidence that profiled a profession which had traditionally relied on insufficiently funded *ad hoc* training provision, alongside an underdeveloped professional career structure.

H1.3 At the close of the millennium, a 'vision' for structured learning was developed by the IFA and unveiled at its 1999 annual conference – the vision was trumpeted as a turning point for archaeological training and employment. At its heart, the vision connected a number of key initiatives by proposing the formation of training programmes, informed by occupational standards, delivered through the mechanism of CPD, and linked to IFA membership standards (Bishop *et al* 1999). Launched March 2000, the IFA's CPD scheme was initially voluntary but intended to become compulsory in a 'relatively short time' to underpin professional credibility (Aitchison 2003). Following sector-wide consultation, the vision crystallised into a six-step plan designed to effectively demonstrate archaeologists' professional skills (Aitchison 2006).

H1.4 Almost ten years after setting out an initial framework into structured training provision, the IfA introduced a compulsory CPD scheme late 2009 (Aitchison & White 2008; Collins 2010).

H1.5 Today, the IfA's Continuing Professional Development scheme comprises a formalised process through which individuals can maintain, improve and broaden their knowledge and skills base across their working life, through a range of learning activities. IfA members are encouraged to create a personal development plan to record their professional aims and objectives, to identify a programme of CPD designed to meet those objectives, and to record the results of their CPD in a log as evidence of achievement. CPD documentation must be available for scrutiny upon request (IfA 2011a). For corporate grade members of the IfA, CPD is mandatory.

H2 ***IfA Registered Organisations***

H2.1 The IfA Registered Organisation scheme provides a 'kite-mark' of quality assurance through an organisation's commitment to adopt and be strictly bound by the IfA's codes of professional conduct and practice.

H2.2 An individual with corporate grade membership of the IfA (Practitioner, Associate, or Member) and holding a high level post within the Registered Organisation's management structure, will be responsible for the effective implementation of the IfA's codes. Should a Registered Organisation comprise more than one division of equal status, multiple individuals of corporate grade membership and at an appropriate managerial level, may be responsible for the implementation of the IfA's codes across that organisation.

H2.3 Within its *Regulations for the Registration of Organisations*, the IfA states (Rule 1.1) that the Registration of Organisations scheme is designed to ensure that organisations carry out their work in accordance with the IfA's *Code of Conduct*.

H2.4 The *IfA Code of Conduct* underlines the individual's responsibility of undertaking a formal programme of CPD (Rule 1.4), and also highlights an organisation's responsibility in providing due regard and appropriate support to the development and training of employees (Rule 5.8).

H2.5 Although the IfA states that CPD is an employee's responsibility, for it to be fully effective, CPD is best undertaken in partnership with an employer. Whilst acknowledging that organisations cannot be compelled to provide financial resources for staff to undertake their training needs, the IfA does confirm that employers benefiting from IfA Registered Organisation status do have a commitment to provide training for their staff, and failure to do so can lead to being referred to the IfA's Professional Training Committee.

' . . . if your organisation is a Registered Organisation (RO) then the IfA can take up such issues on behalf of the staff since training is a direct commitment for all ROs.'
(IfA 2011b: 4)

Annex I: **Specialist Illustrator and In-house Graphics Team Profile:
2010 VIA Snapshot Survey**

I1.1 The following specialist illustrator and in-house graphics team profile represents a summary of data recorded by respondents undertaking the 2010 VIA Snapshot Survey (15 April 2010). The specialist illustrators' profile is representative of all individuals featured in the survey, whilst the in-house graphics teams' profile refer to those offices the specialists work in.

I1.2 Percentages provided in the specialist illustrator section relate to the total number of individuals identified in the survey; similarly, percentages in the in-house graphics team section represent all graphics offices undertaking the survey.

I1.3 Location refers to the geographic location of an organisation's in-house graphics office.

I1.4 The profile format and structure has been designed to mirror that of the IfA's *Profiling the Profession* surveys.

Annex I: **Specialist Illustrators and In-house Graphics Teams Profile: 2010 VIA Snapshot Survey**

Specialist Illustrators			n=80		
<i>Employment</i>			<i>Gender</i>		
Full-time	63	79%	Female	41	51%
Part-time	17	21%	Male	39	49%
<i>Age</i>			<i>Qualifications</i>		
under 20	0	0%	Doctorate	1	1%
20-29	14	17%	Master's	16	20%
30-39	23	29%	First degree	49	62%
40-49	23	29%	Further education	5	6%
50-59	16	20%	Secondary education	9	11%
60 and over	4	5%	<i>Ethnic diversity</i>		
<i>Professional experience</i>			Black/Black British	0	0%
2 years or less	5	6%	Asian/Asian British	0	0%
3-10 years	29	36%	Mixed	0	0%
11-20 years	19	24%	Chinese	0	0%
20+ years	27	34%	White	77	96%
			Other	0	0%
			Not stated	3	4%

In-house Graphics Teams			n=33		
<i>Location</i>					
English region					
Eastern	6	15%			
East Midlands	0	0%			
London	5	12%			
North East	2	5%			
North West/Mersey	3	7%			
South East	5	12%			
South West	5	12%			
West Midlands	2	5%			
Yorkshire/Humber	5	12%			
<i>Organisation role</i>					
Field investigation and research services	25	76%			
Historic environment advice/information services	3	9%			
Museum and visitor/user services	3	9%			
Educational and academic research services	0	0%			
Other	2	6%			
<i>Organisation structure</i>					
National government	5	15%			
Local government	9	27%			
University	3	9%			
Private sector	16	49%			
Self-employed	0	0%			
<i>Organisation size</i>					
Small (1-49 employees)	19	58%			
Medium (50-249 employees)	6	18%			
Large (250+ employees)	8	24%			

Annex J: **Senior Graphics Staff and In-house Graphics Team Profile:
2009-2010 VIA Graphics Office Managers Survey (GOMS)**

J1.1 The following senior graphics staff and in-house graphics team profile represents a summary of data recorded by respondents undertaking the 2009-2010 VIA Graphics Office Managers Survey. The senior graphics staff profile is representative of all individuals featured in the survey and the in-house graphics teams' profile refer to those offices they manage.

J1.2 Percentages provided in the senior graphics staff section relate to the total number of managers identified in the survey; similarly, percentages in the in-house graphics team section represent the offices they manage.

J1.3 Location refers to the geographic location of an organisation's in-house graphics office.

J1.4 The profile format and structure has been designed to mirror that of the IfA's *Profiling the Profession* surveys.

Annex J: **Senior Staff Profile and In-house Graphics Teams Profile:
VIA Graphics Office Managers Survey**

Senior Graphics Staff			n=19		
<i>Employment</i>			<i>Gender</i>		
Full-time	19	100%	Female	7	37%
Part-time	0	0%	Male	12	63%
<i>Age</i>			<i>Qualifications</i>		
under 20	0	0%	Doctorate	2	10%
20-29	0	0%	Master's	3	17%
30-39	4	21%	First degree	9	47%
40-49	5	26%	Further education	0	0%
50-59	8	42%	Secondary education	2	10%
60 and over	0	0%	Not stated	3	16%
not stated	2	11%	<i>Ethnic diversity</i>		
<i>Professional experience</i>			Black/Black British	0	0%
2 years or less	1	5%	Asian/Asian British	0	0%
3-9 years	0	0%	Mixed	0	0%
10-19 years	6	32%	Chinese	0	0%
20-29 years	10	53%	White	19	100%
30+ years	2	10%	Other	0	0%
			Not stated	0	0%

In-house Graphics Teams			n-19		
<i>Location</i>					
English region					
Eastern	3	16%			
East Midlands	1	5%			
London	2	11%			
North East	0	0%			
North West/Mersey	0	0%			
South East	3	16%			
South West	3	16%			
West Midlands	1	5%			
Yorkshire/Humber	6	31%			
<i>Organisation role</i>					
Field investigation and research services	14	74%			
Historic environment advice/information services	1	5%			
Museum and visitor/user services	1	5%			
Educational and academic research services	0	0%			
Other	3	16%			
<i>Organisation structure</i>					
National government	5	26%			
Local government	4	21%			
University	3	16%			
Private sector	7	37%			
Self-employed	0	0%			
<i>Organisation size</i>					
Small (1-49 employees)	9	48%			
Medium (50-249 employees)	5	26%			
Large (250+ employees)	5	26%			

Annex K: **Non-specialist Illustrators' Digest:
2009/10 VIA Telephone Survey**

K1.1 The VIA project identified forty-one organisations featuring in-house graphics offices employing c.100 specialist illustrators.

Organisations	<i>Number</i>
Produced images with specialist illustrators	41
Produced images with non-specialist illustrators	41
Do not produce images	36
TOTAL	118

Table K1.1 Organisations employing specialist and non-specialist illustrators

K1.2 Thirty-six organisations did not produce visual material for specific reasons, namely the commissioning of contractors to undertake all fieldwork and any resulting publication (larger companies), or through a policy of outsourcing due to reasons of cost effectiveness (smaller companies).

K1.3 Nineteen organisations chose to outsource illustration work. Of those, seven organisations outsourced work but did not produce illustrations in-house; nine organisations outsourced and did have in-house graphics capabilities.

K1.4 Forty-one organisations employed staff who were not specialist illustrators but who nevertheless produced images and graphics. These organisations fell into one of two camps; those who had staff with knowledge of a specific software package or with draughting skills; and those organisations whose policy it was for all staff to 'multi-task', but who nevertheless had one or more employees with some extended knowledge of traditional or digital illustration skills.

Organisations employing one or more non-specialist illustrators	<i>Number</i>
A single non-specialist illustrator	19
Multiple non-specialist illustrators	20
Not stated	2
TOTAL	41

Table K1.2 Organisations employing one or more non-specialist illustrators

K1.5 Splits between analogue and digital proficiencies among non-specialist illustrators fall heavily towards the digital. Those organisations offering both traditional draughting skills and digital capabilities, or just traditional skills amount to half of those utilising purely digital skills.

Digital/traditional skills, by organisation	<i>Number</i>
Digital illustration skills	24
Traditional illustration skills	7
Traditional and digital skills	4
Not stated	6
TOTAL	41

Table K1.3 Organisations employing non-specialist illustrators utilising traditional and/or digital techniques

K1.6 Non-specialist illustrators with digital skills favour a limited range of software packages -- CorelDraw and CAD predominate in the office environment.

Preferred software, by organisation	<i>Number</i>
CorelDraw	1
CAD	2
CorelDraw and CAD	5
Adobe Illustrator	1
Adobe Illustrator and CAD	1
Adobe Photoshop	1
Not stated	9
TOTAL	28

Table K1.4 Organisations employing non-specialist illustrators preferred graphics software

Annex L: **Glossary**

Digital Working Practice

Work produced whose results can be stored on a computer disk.

High Level Skills

NQF Level 4 and above (i.e. a university degree).

In-house Illustration Team

One or more specialist staff specifically contracted within an organisation to carry out illustrative and graphic duties on a full- or part-time basis.

Freelance

Businesses and partnerships whose staff only comprise the principals.

Large Organisations

Employing 250 staff or more.

Medium Organisations

Employing 50 staff or more but fewer than 250.

NQF

National Qualifications Framework – UK standardised system of classifying qualifications.

On-the-job CPD

Informal training and development activities undertaken within the IfA's CPD mechanism, but not the sort of learning by experience which could take place all the time.

Off-the-job CPD

Training provided away from the individual's immediate work position and undertaken within the IfA's CPD mechanism, whether on the establishment's premises or elsewhere.

Skills Gap

A lack of skills, work experience or qualifications among workers already employed in a job. (i.e. skills gaps refer to gaps internal to an organisation).

Small Organisations

Employing fewer than 50 staff.

SME

Small and Medium Sized Enterprise – a business employing fewer than 250 people.

Traditional Working Practice

Work produced whose results are generated and stored on traditional media, but not originating from digital files.

Upskilling

An employer is described as having upskilling needs where they say that any of their staff need to acquire new skills or knowledge over the next 12 months, (i.e. as a result of the development of new products or services).

Annex M: **VIA Project Team**

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