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The National
Skills Academy
CREATIVE
& CULTURAL

Building a Creative Nation: The Next Decade

What the current literature tells us about the future skills needs of the creative and cultural industries

Contents

You can download this report at **www.ccskills/ten-years-ahead**

1. Introduction

The creative industries in the UK have doubled in size in the last ten years, proving resilient through recession, and are forecast to grow significantly in the next ten. Governments internationally are now seeing the promotion of creativity as a key way to promote economic growth. However, the only way that continued growth will be sustained is through strategic development to ensure that the sector has the right skills in place so the right jobs can be fulfilled at the right time.

This report, published on the eve of Creative & Cultural Skills' tenth anniversary conference in 2015, aims to synthesise the current drivers of change the sector is facing, and review what the literature is anticipating about future skills needs and gaps. It aims to provide a useful summary for members and friends of the National Skills Academy network, to support arguments for new education, skills and training initiatives which seek to be as relevant as possible to the needs of the creative industries.

Firstly, the report shows the economic context in which the creative industries sit, and summarises what the current official statistics tell us about the sector. It then goes on to examine the key drivers of change anticipated over the forthcoming decade, examining where growth and differences in job occupations may emerge. These include the rise of self-employment and the impact this has on the creative labour market; the changes to public-sector funding and how this changes approaches to skills development; and the impact of new technology on the sector.

We then look at the key skills challenges facing the sector, providing some conclusions on some of these areas of change. These include the importance of understanding digital skills needs with greater granularity; what it really means to have a 'T-shaped' set of skills (or being both a specialist and a generalist), and the increase in demand for higher level professional and technical skills in the creative industries.

We also provide here what we hope will be a helpful bibliography of the key reports, statistics and most recent strategy papers which help to make the case for creative skills development. If you need any help analysing the data in respect to your local area please get in contact.

Samuel Mitchell
Head of Research, Creative & Cultural Skills, March 2015

2. Context of the study

The years from 2005 to 2015 have been turbulent for the UK economy, beginning with a period of rapid growth, followed by the financial crash of 2008 and a subsequent return to modest advancement after a period in the economic doldrums. In part due to the crash, the nature of work in the UK has dramatically changed during this period as well. A shift towards self-employment due to a lack of opportunities elsewhere, a squeezed public sector (and publicly-funded sector) and a significant shift towards digital occupations have all emerged as major trends across the economy.

It is undeniable that there have been winners and losers for the creative industries during this period. From a top-down view, the sector has looked like one of the few success stories in Britain's pitch to maintain itself as a global economic player, however digging deeper shows a more nuanced story. While there has been a strong level of growth across IT and software companies, along with design professionals, there has been a retrenchment in employment in the arts and culture sector. Here, public funding has been slashed and local authorities have tightened – or decimated – support for museums, arts and community focused projects. Disruptions in business models related to the music industry and areas such as publishing and journalism have also created new structures while disturbing the old guard of major businesses.

Globalisation has also increasingly driven change, making work increasingly competitive across Britain. Graduates and young people emerging into the labour market are now in competition with people from across Europe and the rest of the world, settling in creative hubs such as London and the South East. People and organisations that contract creative services are increasingly willing and able to draw on expertise from outside the UK – the Design Museum in London recently commissioned Dutch consultancy Fabrique for a website overhaul for example. [1] This leads to an ever-more competitive labour market and environment in which to conduct business.

One consistent factor in the creative industries throughout this period is the high number of talented, ambitious and entrepreneurial workers that are drawn towards the sector. Each year, a vast over-supply of graduates from higher education attempt to break into these industries, perhaps driven in part by the culture of celebrity which is transmitted through media channels, while often ignoring the low-wage, low-job reality that exists in these areas. There may also be a 'values-driven' drive to work in this sector, with millennials in particular seeking to access 'meaningful' careers at a higher rate than generations that have preceded them. [2]

The focus on creative work derives not only from its perceived status amongst particularly young entrants, but in the UK's shift away from a strong manufacturing base to a country that is more reliant on a service-led industry and the knowledge economy. The success of the UK's information economy, the tourism sector and the prosperity and liveability of cities are all intimately linked to creative work in its various guises. Indeed, the growth of creative occupations located outside of the creative industries seems to point to a world where this is an attribute that is increasingly spread across the economy as a means of generating value through innovation.

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[1] It's Nice That (2014), We chat to Fabrique's team about the Design Museum website redesign.
[2] Global Tolerance (2015), The Values Revolution.

Creativity in management and policy making seems to be gaining traction across a range of areas. There is much discussion in the UK about the role of design in policy-making, particularly in the opening of a Policy Lab to explore government interventions through a design perspective – an initiative that draws much from European and Scandinavian forerunners.[3]

In the USA, the creative industries have crossed over into government in the area of tech. The recent launch of Healthcare.gov, one of Barack Obama's flagship policies, was saved from disaster by a team of tech specialists headed up by a senior figure at Google.[4] Tapping into creativity is an area in which governments have been notoriously poor, however these examples seem to show that it is not only the private sector that can exploit the abilities of a range of specialists that would fall into the current Department for Culture, Media and Sport's classification of a 'creative' worker.

With the widespread acceptance of the growth of the creative industries, and the wider social, economic and well-being benefits deriving from a vibrant creative ethos more generally, there is an increasing need to bolster the education sector's engagement and understanding of these areas of work. This includes examining new areas of growth and expansion, why a generalist creative education is of consequence and what individual job roles offer within the creative industries.

What the official statistics tell us

The creative industries enter 2015 in a position of significant strength, in comparison to their position just ten years previously. The economic and employment growth shown by this sector is bolstered by continued government endorsement of their actions, along with renewed public support through cultural events such as the Olympic Games.

Table 1: Employment in the Creative Economy from 1997 to 2013[5]

	Employment in the Creative Economy 1997	Employment in the Creative Economy 2013	Percentage Change
UK Total Employment	**27,706,000**	**30,643,000**	**10.6%**
Creative Economy (creative industries + creative occupations located in the whole economy)	1,806,000	2,616,000	44.8 %
Creative Industries	931,000	1,708,000	83.5 %
Creative Jobs in the Creative Industries	373,000	890,000	138.4 %

[3] Design Council, (2014)UK Cabinet Office Launches New Policy Design Lab.

[4] Brill, S. (Time Magazine) (2014), Code Red: Inside the Nightmare Launch of Healthcare.gov and the Team that Figured Out how to Fix It.

[5] DCMS (2015), Creative Industries Economic Estimates.

"2.61 million people are currently employed within the creative economy"

2.61 million people are currently employed within the creative economy, with 908,000 people in creative roles working outside the creative industries in the wider economy. Even more eye-opening is the rate of change that has taken place in this area of the economy over the previous 16 years. Employment in the creative industries has increased by a staggering 83.5 % from 1997-2013, as opposed to 10.6 % within total UK employment as a whole.[6]

The UN has recognised this position globally, stating that:

"The creative economy is not only one of the most rapidly growing sectors of the world economy, but also a highly transformative one in terms of income generation, job creation and export earnings." - UNESCO and UNDP, Creative Economy Report[7]

Despite this macro view of success, the creative sector represents a cluster of industries that operate in a number of different models. For example, within visual arts, museums and galleries and, to some degree, performing arts there are significant public subsidies for organisations and businesses. These organisations operate within complex 'mixed models' of public subsidy, private philanthropy, corporate social responsibility contributions, donations and earned income.[8]

Other industries work in a more straightforward model. For example, the contemporary music industry has its own job roles and is far less reliant on public funding, although in specific instances that may play a part. The design industry is also strongly independent of public support, although architecture as a corresponding and interlinking industry has a great crossover with publicly funded housing or building initiatives, although it is not directly subsidised by them.

Yet more areas of the creative industries are established as separate entities, but are currently coming up against disruption from technology in terms of their business models. The music and publishing industries have both been changed immeasurably through the emergence of new technological platforms, which have allowed their products to be disseminated and consumed in whole new ways, often to the detriment of traditional sales models. These issues have significant ramifications for the future of work. For example, the sale of books and music may in future be based on occupations related to data analytics and measures of impact, rather than traditional A&R and editorial processes.

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[6] DCMS (2015), Creative Industries Economic Estimates.

[7] UNESCO and UNDP (2013), Creative Economy Report, 2013 Special Edition: Widening Local Development Pathways

[8] House of Commons Culture, Media and Sport Committee (2011), Funding of the Arts and Heritage: Third Report of Session 2010-11.

The current skills profile of the creative industries

In terms of the UK's skills profile generally, there is an acceptance that while qualification levels have generally increased, the rate of change is still not competing with other countries in international rankings. This is likely to have severe repercussions in an increasingly globalised and interconnected world.

'The UK Commission for Employment and Skills (UKCES) has analysed data from the OECD to show that the UK now ranks 19/33 in low level skills, 24/33 in intermediate level skills and 11/33 in high level skills.[9]'

The changes in policy over the last ten years have had an impact however; in the period 2002-2012 the UK managed to reduce its low-skilled workforce by 11 %, and increased its high skilled workforce by 11.4 %. However, there has been very little shift in the 'intermediate' skills of the workforce, an area where the UK has been notoriously poor in terms of performance, compared to Germany, which relies heavily on a technically well qualified, but not necessarily academic workforce.[10]

The creative economy, meanwhile, has a qualification and skills structure far more geared towards high level qualifications. 67 % of the workforce is equipped with qualifications from higher education, while only 16 % have qualifications at level 2 or below (low skills). There are obviously limitations in the use of qualifications as a proxy for skill levels though, as it is anecdotally known that many workers in the creative industries have a high level qualification that does not relate to the skills they use in work.[11]

Work within the creative industries is often centred on technical skills, which the UK tends to be poor at producing. Within the economy overall, the proportion of vacancies that were 'hard to fill' due to skills shortages has increased from 16 % in 2011 to 22 % in 2013. Further to this, the UKCES point out that a lack of 'technical, practical and job-specific skills' was the biggest issue, with 63 % of employers citing this as a reason why applicants were not ready to enter into these roles.[12]

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[9] UKCES (2014), UK Skill Levels and International Competitiveness, 2013.
[10] Ibid.
[11] DCMS (2014), Creative Industries: Focus on Employment.
[12] UKCES (2014), Employer Skills Survey 2013: UK Results.

3   The drivers of change for the creative industries 2015 – 2025

The rise of self-employment

Self-employment has been growing in prominence since before the financial crash of 2008; however since then it has increased significantly. At this point in time, 1 in 7 workers within the UK economy work on a self-employed basis. This is also set to increase further, with forecasts predicting that self-employment will overtake public sector employment by 2020.[13] Labour market statisticians have put forward a number of explanations for the rise of self-employment, including the exploitation of workers to ensure that companies do not have to pay long-term sickness or pension contributions. Alongside this, technological changes have allowed people to work in a more flexible manner, and many self-employed people can now adjust to changes in their lives (such as caring for a relative) in an easier manner.

The New Policy Institute (NPI) has shown the growth in self-employment in a more negative light. As this rise has been spurred primarily by older workers, the NPI sees an overall shortage of jobs as something that 'manifests itself as high unemployment among the young, (but) … shows up as rising self-employment among older workers'. Self-employment is therefore a last resort in a poor job market, rather than a suitable career path which allows greater autonomy and flexibility.[14]

Within the wider economy, the rise of self-employment is seen as a negative effect of the financial crisis of 2008 which had been gradually building before that point. Self-employed people tend not to contribute as much to the economy, have low earnings and are often second-jobbers, taking on additional work as their first role does not provide them with enough income. From a macro-economic perspective, Steven Toft wrote for the RSA that there is a negative correlation between self-employment rates and per-capita GDP. By this reckoning then, countries with higher levels of self-employment are usually poorer.[15]

This is an area of direct concern to the creative sector. The creative industries are made up of an infrastructure that includes a myriad of self-employed freelancers and 'portfolio' workers (those that work on more than one project at a time, often in different fields). These portfolio working practices actually bear little resemblance to self-employment in the wider economy, in that they rely heavily on large networks of co-workers, commissioners and projects. However, it is often noted that portfolio working happens in part due to the low wages that are widespread within creative work.

Research by a range of academics, along with organisations such as Nesta and Creative & Cultural Skills has shed light on some of these practices over the past five years. For example, people whose primary practice is in theatre are often involved in education projects in order to supplement low wages from their creative work. Furthermore, this supplementary work actually makes up a higher proportion of income in relation to time invested, as opposed to their theatre work.[16]

[13] Demos (2014), Going it Alone.
[14] New Policy Institute (2012), Work and Pay: Who are the new self employed?.
[15] Toft, S. (2014), Is the Rise of Self-employment really a Good Thing? RSA Guest Blog.
[16] Creative & Cultural Skills, Arts Council England and Nesta (2013), Publicly-Funded Arts as an R&D Lab
    for the Creative Industries? A Survey of Theatre Careers in the UK.

"A-N conducted research which showed that 71 % of artists exhibiting in publicly funded galleries received no fee for their work."

Similarly, in visual arts, A-N conducted research which showed that 71 % of artists exhibiting in publicly funded galleries received no fee for their work.[17] Furthermore, 57 % generated less than a quarter of their income through their art. These people were instead engaging in a whole range of portfolio practices, such as education or community arts, to create a viable income.

In terms of the rate of self-employment within the sector, previous research by Creative & Cultural Skills has shown that 43.5 % of the sector is self-employed. This does range quite dramatically for various sub-sectors though. Literature, not including the publishing sector, is made up of creative writers, agents and other largely self-employed professionals. However on the other end of the spectrum museums and cultural heritage organisations experience low rates of self-employment, as the workforce is often tied to a specific site or institution.[18]

While there is clearly a concern at the moment that the self-employed in the wider economy are being exploited and potentially underperforming in terms of productivity, there are also advantages. These include the flexibility to go where demand for the arts is highest, and the ability to work across a whole range of projects and across different networks of people in an interconnected manner.

"...research by Creative & Cultural Skills has shown that 43.5 % of the sector is self-employed."

However, as the Demos report on self-employment, Going It Alone, hypothesises, there may need to be a rebalancing act to protect self-employed people, as 1 in 7 people in the economy move into this type of work. The report states that in this environment 'freelancers need to be able to stand up for their own interests against government and against large companies'.[19] The report explores a number of policy interventions, such as incentivising training for freelancers through the tax system and creating a tailored pension system which would increase the efficiency and viability of self-employed people working in the UK.[20] The growth of self-employment has a significant impact on the way we need to think about skills development in the future.

[17] a-n The Artists Information Company (2014), Paying Artists: Valuing Art, Valuing Artists. Securing a Future for Visual Arts in the UK.
[18] Creative & Cultural Skills (2012) Impact & Footprint 2012/13.
[19] Demos (2014), Going it Alone.
[20] Ibid.

The maintenance of the UK as a global hub for tourists

In the wake of large-scale sporting events like the Olympic Games there has never been more emphasis on the UK as a prime destination for people from all over the world. Research by Visit Britain and Deloitte shows that £161 billion or 11.4 % of the UK's GDP is created through the 'direct, indirect and induced' contribution of the tourist economy. Furthermore, it serves to create 3.79 million jobs – or more than 1 in 10 people in the UK.[21]

Attitudinal research by the British Council into young, educated people in Brazil, China, Germany, India and the US found that the UK is extremely attractive as a tourist destination. Cultural and historic attractions were seen by 61 % of the surveyed group as making a country attractive to the respondents and 52 % said the same thing about the arts.[22]

When the report looked at the UK in particular, art, culture and the creative industries ranked at the top, or near the top, in terms of the characteristics that made the country attractive to visitors. 42 % of respondents felt cultural and historic attractions made the UK particularly attractive (the most cited reason), while 39 % said 'cities' (second most cited) and 36 % said 'arts' (third most cited). Clearly, the strength of both the UK's past history and culture combined with the vibrancy of the arts sector generally has made the UK a worthwhile destination to potential tourists.[23]

It is, however, worth noting the specific aspects of arts and culture that these countries think of when considering the UK in terms of attractiveness. These relate most closely to those areas that are publicly subsidised, in particular 'historic buildings/attractions' and 'arts/cultural institutions/attractions'.[24] During a period of public funding retrenchment it is worth considering the extent to which these institutions and sites are driving tourism to the UK.

The economic benefits of foreign tourism to the UK can be seen in a number of analyses of key sectors. UK Music for example has identified the great increases in spending on music by overseas tourists in comparison to UK holidaymakers. Overseas visitors comprised a total of just 6 % of all music tourists in the UK, yet accounted for a total of 20 % of spending.[25] Clearly the increase in the number and range of tourists that come to the UK specifically to consume and interact with the creative sector show that this will be a key driver of growth in the next 10 years.

Allied to this growth, there is also a need to maintain and build the workforce that can work on major events, tourist attractions and festivals in the future. This may require an increase in the number of workers that can manage multi-art form events, tie in tourist attractions with digital possibilities and bring increased levels of professionalism and safety to large-scale events.

[21] Deloitte and Oxford Economics (2013), Tourism: Jobs and Growth. The Economic Contribution of the Tourism Economy in the UK).

[22] British Council (2014), As Others See Us: Culture, Attraction and Soft Power.

[23] Ibid.

[24] Ibid.

[25] UK Music (2013), Wish You Were Here: Music Tourism's Contribution to the UK Economy.

Public sector funding for the creative industries

Arts Council England, Arts Council Wales, Arts Council Northern Ireland and Creative Scotland, have all experienced severe cuts to both their administrative budgets and their grant giving funds in the recent period, which has, and will have in the future, a significant impact on the industry's skills base. Local authority funding has also proved patchy during this period, as some have aimed to support the arts, while others have seen it as the first area in which they could implement strong (and sometimes complete) cuts to funding.

These cuts have come amidst an attempt by the Coalition Government to reduce the size of the UK's deficit, and are comparable with other areas of public sector purse-tightening over the period since 2010. What has perhaps been less clear until recently though is the extent to which these cuts would continue, and in some scenarios worsen, in the period 2015-2020.

The Office of Budget Responsibility (OBR) gave its views in 2014 on the Coalition's deficit reduction scheme over a ten year period. The OBR states that the public sector has already taken some of this burden, but will shoulder substantially more over the next five years:

"Looking forward, the Government's policy assumption for total spending implies that the burden of the remaining consolidation would fall overwhelmingly on the day to day running costs of the public services…Around 40% of these cuts would have been delivered during this parliament, with around 60% to come during the next" - The Office of Budget Responsibility, Economic and Fiscal Outlook [26]

This further threat to public sector funding over the next five years carries major implications for both the education sector and government spending on arts. There is a strong possibility of further and deeper funding cuts being implemented across Whitehall, with the arts unable to claim a ring-fenced or protected budget, unlike healthcare.[27]

Related to this, arts organisations have shifted towards a 'mixed model' of funding, increasingly relying on a mixture of public funding, earned income and philanthropic donations in order to continue their work.[28] Attempts to drive growth in the creative industries by this government have come less through up-front public subsidy and more through a series of support initiatives and tax reductions. Examples include tax breaks for touring theatre companies and orchestras, video game creation and film credits.[29]

[26] The Office of Budget Responsibility (2014), Economic and Fiscal Outlook: Executive Summary.
[27] The New Statesman (2013), Is Osborne about to Demolish the Culture Department.
[28] Peter S Phillips (2012), Philanthropy Beyond London: A Report Commissioned by the Secretary of State for Culture, Media and Sport.
[29] HM Treasury (2014), Tax relief encouraging regional theatre touring productions launched by Chancellor.
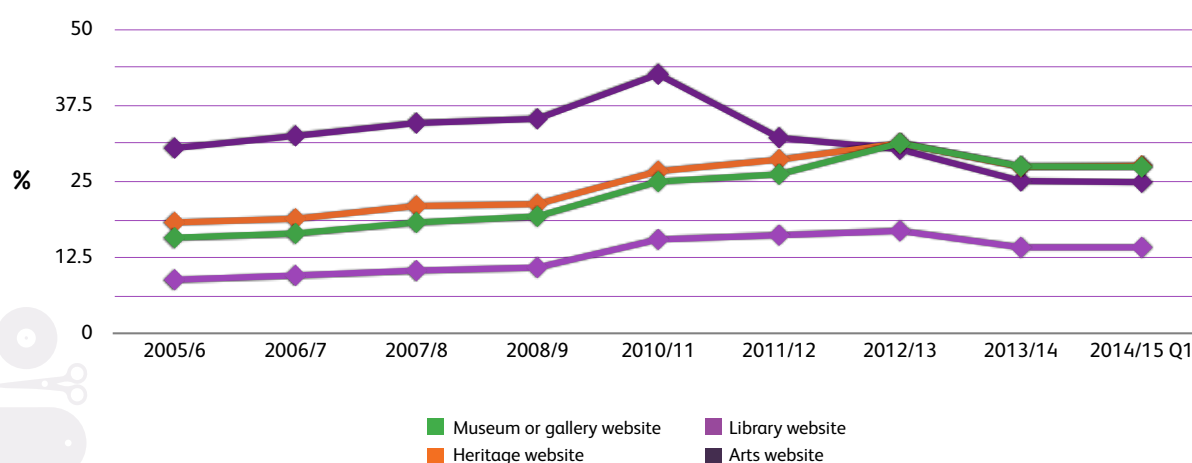
The overall public funding context therefore has a significant impact on the future skills base of the creative industries, particularly with regards to those institutions that receive direct subsidy, either from local authorities or centralised sources. Within the cultural heritage and historic environment sector, for example, there is already recognition that areas such as 'budget planning', 'identifying new and alternative sources of finance' and 'managing sustainability and growth' are key future skills needs.[30] These issues can anecdotally also be seen to cross over into other areas of the creative industries. People with expertise in fundraising, creating alternative and new revenue models and harnessing new sources of income will become increasingly significant across all organisations.

The drive towards a digital future

Another key driver for work in the creative industries is the omnipresence of the online world in everyday life. The creative industries have been both at the forefront of heralding a new digital age, through the creation of video games, the cross-over between creativity and technological innovation in the start-up sector, and the democratisation of cultural outputs through a whole range of online platforms. However, digital technologies have also transformed creative industries in ways that are not seen by all as wholly positive. In publishing, online distributors like Amazon have come into conflict with traditional publishing houses over their near-monopoly of the direct retail of books.[31] Meanwhile in the music industry major labels have lost power to a range of technology companies that offer direct download and streaming services.

The DCMS Taking Part survey shows how significant online platforms are for the arts and culture sector. The chart below shows the rate of engagement of the UK population with online platforms for the arts over a period since 2005.

Figure 1: Table to show digital engagement with culture of UK adult population over time.[32]

Legend:
- Museum or gallery website (green)
- Heritage website (orange)
- Library website (purple)
- Arts website (dark)

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[30] Creative & Cultural Skills (2013), The Historic Environment and Cultural Heritage Skills Survey of the Tourism Economy in the UK).

[31] Vanity Fair (2014), The War of the Words: How did Amazon End Up as Literary Enemy Number 1?.

[32] DCMS (2014), Taking Part 2014/15 Quarter 1 Statistical Release.

While arts websites show a curious drop in overall engagement in the last few years, it is undeniable that part of the UK's engagement with the formal arts sector is now entrenched in the digital realm. It is undisputed that organisations that are able to broaden their audience and add depth to the level of engagement with their art form through online approaches over the next ten years will emerge in the most sustainable and powerful positions.

Nesta, Arts Council England and the Arts and Humanities Research Council have been working to provide longitudinal evidence to benchmark the performance of arts organisations in the digital space. This research gives some insight into the directions of travel that may emerge over the coming years, both in terms of overall trends and job roles.

"There has been a 17 % increase between 2013 and 2014 in the percentage of arts organisations that now describe digital technology as important or essential to their business model."

The research, entitled Digital Culture 2014: How Arts and Cultural Organisations in England use Technology, paints a picture of rapid change in the engagement of arts organisations with the digital realm. There has been a 17 % increase between 2013 and 2014 in the percentage of arts organisations that now describe digital technology as important or essential to their business model. This figure now stands at over half (51 %) of all arts organisations. The number of organisations publishing content on free platforms online (e.g. Facebook, YouTube) has also risen by 4 % to 88 % of all organisations in 2014.[33]

The increase in engagement and work in the digital sphere does lead to impacts upon arts organisations though, particularly in terms of skills and knowledge. Over a third of arts organisations feel that they do not have the in-house skills, IT systems or expert advice to meet their future plans for digital work.[34] There are therefore significant ramifications for the drive towards digital in the arts that affect both the education and skills sectors.

Within the wider creative industries the change and disruption to online business practices related to creative industries such as music, publishing and television all allow for the expansion and democratisation of audiences, although this comes at the price of increased levels of piracy, a loss of market share to new technology platforms and changing talent needs beyond their traditional structures.

Enders Analysis and Bain Consulting, the global management consultancy firm, have looked in depth at these issues, which have much of their basis in the rise of online advertising as a means of monetising content, with UK consumers spending £91 billion online in 2013. As the report notes:

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[33] Nesta, Arts Council England and AHRC (2014), Digital Culture 2014: How Arts and Cultural Organisations in the UK use Technology.

[27] Ibid

'Just as the creative industries seem to occupy a disproportionately important place in the UK psyche and economy, the Internet—by far the largest advertising medium in the UK, having overtaken television and print in recent years—now accounts for 36 % of UK advertising spending, more than in any other major economy. - Bain and Company and Enders Analysis, Creative UK'[35]

While, to some degree, the output of art and 'creative content' remains relatively unchanged, its consumption patterns are so transformed that a whole new digitally embedded workforce will be needed (and is already formed to a great degree) in order to harness, promote and capitalise on it. These workers will need to understand data and analytics in ways that were not used before. There may also be new methods of project management in terms of the creation of digital content, related to creating more 'live' and constantly evolving projects, rather than single, static outputs.

Automation of jobs and resilience of the creative industries

A fascinating area of the digitalisation of much of today's world is its impact on the workforce of the future. While the computerisation and automation of jobs has been in existence for decades in relation to certain roles, the low productivity of the labour market has led to additional questions around this area.

Research by Frey and Osborne in the USA suggests that as much as 47 % of total US employment is at risk due to automation.[36] Primarily, low-skilled work is at risk, with their research showing a negative relationship between job loss and high wages and high educational attainment. In the past automation has taken over manufacturing roles to a far greater degree than other roles in the economy; however this may be set to encompass a broader range of sectors in the future.

Additional research by Nesta, however, shows that creative occupations are primarily at a 'low or no' risk of automation, with 87 % of these jobs in this category. It therefore seems pertinent to suggest that there may be a further reliance on these industries, while automation is able to create additional productivity in other areas of the economy.[37]

A focus on the 'knowledge economy' then, does increase the likelihood that highly creative, highly innovative occupations will be in some senses 'protected' from automation, however there are also large amounts of support occupations within the creative industries that might begin to be tested by this shift in the jobs market. In terms of future skills needs, Frey and Osborne point out that there may need to be a re-education of low-skilled workers towards 'creative skills and social skills' which are key in making roles immune to automation or computerisation.[38]

[35] Bain and Company and Enders Analysis (2013), Creative UK.
[36] Frey, C.B. and Osborne, M.A. (2013), The Future of Employment: How Susceptible are Jobs to Computerisation?
[37] Nesta (2014), Creativity Versus Robots.
[38] Frey, C.B. and Osborne, M.A. (2013), The Future of Employment: How Susceptible are Jobs to Computerisation?

The rise of the collaborative economy

A major change in the way that creative companies, projects and ideas emerge in the UK is the emergence of seed-funding models for start-up companies that rely on individual small-scale investors into an idea or product. Combined with this is the rapid rise of crowdfunding platforms such as Kickstarter which rely on investment for creative ideas, although not to the extent of giving a financial stake (shares) in a company or product.

"PwC estimate that the sharing economy is currently worth £9 billion globally, however they project that by 2025 this could be worth £230 billion."

Kickstarter in particular has exploded into the public consciousness, through high-profile products like Oculus Rift, a virtual reality headset that sold to Facebook for approximately two billion dollars.[39] Since 2009, almost $1.5 billion dollars has been raised for 75,000 successful projects, many firmly in what the DCMS would describe as creative sectors. This investment has come from a total of 7.5 million 'backers' of individual projects.[40]

In terms of participation, these platforms are not only changing the content of what is being created, whether video games, investment for a play or music project, they also create a new relationship between previously passive consumers and the creative company or talent seeking funding. This has implications for the way in which the audience will consume culture in the future, with perhaps more of an expectation around a personal or bespoke experience or product. While globalisation is clearly making markets more accessible, the rise of peer-to-peer interactions could see products, services and experiences are more wide-ranging off the back of larger platforms.

This is all linked back to the collaborative, or 'sharing', economy. A recent report for the Department for Business, Innovation and Skills (BIS) defined this as 'online platforms that help people share access to assets, resources, time and skills'. These platforms in their broadest sense could help to create economic prosperity out of latent or unused skills (e.g. a design skill sold on a part-time basis) and goods (e.g. a spare room in a house rented on Airbnb). PwC estimate that the sharing economy is currently worth £9 billion globally, however they project that by 2025 this could be worth £230 billion.[41]

Clearly the rise of the collaborative conomy affects all aspects of the UK's workforce, whether in a positive sense (such as the online craft store Etsy – which gives part time craft makers a marketplace for their goods) or disruptive, as is the case for services such as the taxi company Uber, which has seen widespread protest from the licensed taxi industry. This new part of the economy is being forged in part by creative workers, specifically those that cross-over between technology and design, advertising and marketing. 'T'-shaped skills (discussed in more detail later) and the 'fusion' of creative abilities with technical computer or STEM-based skills will be particularly vital to ensure that the UK remains able to exploit opportunities in this developing area.

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[40] Kickstarter (2014), Kickstarter Website Stats.

[41] Wosskow, D. (Commissioned by BIS) (2014), Unlocking the Sharing Economy: An Independent Review.

4 The growth and skills challenges of the creative industries

"Nesta have suggested an ambitious target of seeing the number of creative occupations in the whole economy expand from 1.8 million to 2.8 million by 2025"

The high rate of future growth of the creative industries, as discussed elsewhere in this report, is no longer in dispute. Nesta have suggested an ambitious target of seeing the number of creative occupations in the whole economy expand from 1.8 million to 2.8 million by 2025, through a range of policy measures that would see future governments placing creativity at the heart of industrial policy.[42] This is more of an ambition than a forecast however, based on a very top-level assessment of the UK economy, rather than a prediction.

In more concrete terms, the UKCES have produced a range of economic forecasts over the past five years entitled Working Futures. The most recent set of estimates tries to form a view of occupational change from 2012-2022, based on occupational groupings. These estimates suggest that employment in creative occupations represented in DCMS' view of the creative industries will increase by 307,000 workers. While all forecasts are by their nature imprecise, this does point to a significant continuation of employment growth over the next seven years.[43]

As can be seen from table 2, overleaf, there are significant areas of growth related to the design industry, the museums, galleries and libraries sector and the music, performing arts and visual arts sector (which are conflated in line with the DCMS's methodology). Furthermore, this change does not preclude significant additions to the 'support' occupations needed to harness the creative talent – administrators, managers, front of house staff and so forth.[44]

This rate of growth also does not account for people moving out of creative occupations, either into retirement or into other occupations which would leave space for replacement demand in the jobs market. This could potentially mean a great deal more vacancies becoming available in the seven years up until 2022. The Working Futures forecasts here are backed by the work conducted by the DCMS to look at the change in creative occupations from 2011-2013. During this period, these occupations grew by 7.3 % - a faster rate than these projections outline.[45]

The rate of change in relation to how fast these occupations and industries grow is therefore still a source of educated guess work on behalf of a number of independent bodies and the government. However, expert opinion maintains that overall growth is set to be strong. The question then turns to the abilities, skills and knowledge of the people within those industries to create economic and social prosperity through their work.

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[42] Nesta (2014), One Million New Creative Jobs in the UK Economy.
[43] UKCES (2014), Working Futures 2012-2022..Additional analysis conducted by Mark Spilsbury on behalf of Creative Skillset and verified by UKCES.
[44] Ibid.
[45] DCMS (2014), Creative Industries: Focus on Employment.

Table 2: UKCES Working Futures

Forecast of creative occupational employment in the UK, 2012 – 2022 by group

		2012	2017	2022	Change, 2012 - 2022	
					Number	%
Advertising & marketing		**456,054**	**500,871**	**547,555**	**91,501**	**20.1**
1132	Marketing and sales directors	191,000	213,000	235,000	43,000	22.5
1134	Advertising and public relations directors	21,000	23,000	26,000	5,000	22.5
2472	Public relations professionals	43,0008	47,000	51,000	8,000	19.8
2473	Advertising accounts managers and creative directors	33,000	36,000	40,000	7,000	19.8
3543	Marketing associate professionals	168,000	181,000	196,000	29,000	17.0
Architecture		**97,000**	**106,000**	**114,000**	**17,000**	**17.8**
2431	Architects	57,000	63,000	68,000	11,000	19.8
2432	Town planning officers	18,000	20,000	22,000	4,000	19.8
2435	Chartered architectural technologists	4,000	4,000	4,000	*	*
3121	Architectural and town planning technicians	18,000	19,000	20,000	2,000	8.9
Crafts		**91,000**	**88,000**	**90,000**	*****	*****
5211	Smiths and forge workers	5,000	5,000	5,000	*	*
5411	Weavers and knitters	2,000	2,000	2,000	*	*
5441	Glass and ceramics makers, decorators and finishers	9,000	9,000	9,000	*	*
5442	Furniture makers and other craft woodworkers	40,000	39,000	40,000	*	*
5449	Other skilled trades nec	34,000	33,000	34,000	*	*
Design		**128,00**	**137,000**	**146,000**	**18,000**	**14.5**
3421	Graphic designers	73,00	79,000	84,00	11,000	14.5
3422	Product, clothing and related designers	54,405	58,329	62,266	7,862	14.5

		2012	2017	2022	Change, 2012 - 2022	
					Number	%
	Film & TV	**136,000**	**146,000**	**156,000**	**20,000**	**14,5**
3416	Arts officers, producers and directors	63,000	67,000	72,000	9,000	14.5
3417	Photographers, av and broadcasting equipment operators	74,000	79,000	84,000	11,000	14.5
	IT, Software and computer services	**519,000**	**583,000**	**627,00**	**107,000**	**20.7**
1136	Information technology and telecommunications directors	60,000	67,000	74,000	14,000	22.5
2135	IT business analysts, architects and systems designers	113,000	127,000	136,000	23,000	20.4
2135	Programmers and software development professionals	277,000	311,000	333,000	56,000	20.4
2136	Web design and development professionals	70,000	79,000	84,000	14,000	20.4
	Publishing	**148,000**	**161,000**	**173,000**	**25,000**	**17.1**
2471	Journalists, newspaper and periodical editors	74,000	81,000	88,000	15,000	19.8
3412	Authors, writers and translators	74,000	80,000	85,000	11,000	14.5
	Museums, galleries and libraries	**42,000**	**46,000**	**50,000**	**8,000**	**19.8**
2451	Librarians	30,000	33,000	36,000	6,000	19.8
2452	Archivists and curators	12,000	13,000	15,000	2,000	19.8
	Music, performing and visual arts	**132,000**	**141,000**	**151,000**	**19,000**	**14.5**
3411	Artists	43,000	46,000	49,000	6,000	14.5
3413	Actors, entertainers and presenters	38,000	41,000	44,000	6,000	14.5
3414	Dancers and choreographers	15,000	16,000	17,000	2,000	14.5
3415	Musicians	35,000	38,000	40,000	5,000	14.5
	Creative occupational employment	**1,749,000**	**1,909,000**	**2,055,000**	**307,000**	**17.5**

Digital skills needs for the creative industries

The Creative Industries Council set out an industry-led strategy in 2014 in an attempt to future-proof the creative sector through a number of education initiatives. In particular, the report noted that now there was a growing consensus around individuals to have:

'A fusion of creative, digital, STEAM (Science, Technology, Engineering, Arts, Maths) and business skills.'
– Creative Industries Council, Create UK[46]

This vision of the creative worker is to some extent true of the current UK economy and the drivers of change discussed earlier in this report. However it also a reaction to government education policy, which through a variety of practices has set out to promote English, Mathematics and the Sciences as 'core' subjects which enable future study and work in the broadest range of areas.

Despite the STEAM agenda being somewhat reactionary to this perceived focus on STEM (Science, Technology, Engineering and Mathematics), it is true that digital and science-related occupational growth is currently growing at a higher rate than other parts of the creative industries, meaning that this cross-over will be important across occupational areas in those industries.

A survey of Creative & Cultural Skills' stakeholders identified how important these digital changes would be in the future. 69 % of businesses surveyed felt that they were either fairly or very concerned with the need to adapt to new technology and incorporate new ways of working in the next 2-5 years.[47] This therefore presents a significant skills challenge for these businesses, who not only have to hire or up-skill staff, but also identify digital attributes that are correct for their new workforce in the future.

These digital skills challenges do not apply only to the digital footprint of the creative industries, such as software or computer games development. Instead, these tend to go across all of the sectors. For example, in Cultural Heritage Institutions (museums, historic houses etc.) digital skills are seen as third only to work-based skills (such as administrative abilities) and specialist skills (for example, specific conservation skills) in terms of areas where applicants lack ability. Almost one in five (18 %) entrants or new applicants lack skills in this area, which could become increasingly important in the future.[48]

[46] Creative Industries Council (2014), Create UK: Creative Industries Strategy.
[47] Creative & Cultural Skills (2014), Stakeholder Survey 2014 (Internal Report).[37] Nesta (2014), Creativity Versus Robots.
[48] Nesta, Arts Council England and AHRC (2014), Digital Culture 2014: How Arts and Cultural Organisations in the UK use Technology.

Similarly, the AHRC, Nesta and Arts Council England identified that arts and cultural organisations would be looking to increase their rate of digital adoption further in relation to the following activities:

- Use crowdfunding platforms
- Accept online donations
- Sell products or merchandise online
- Provide educational content or online events.[49]

The rate of growth of these, and other digital activities, will have a strong knock-on effect on the whole workforce, but in particular entrants who will now be expected to be digitally skilled in their work, regardless of the specific sector that they go on to work in. It is important to note that over a third of organisations (36%) still feel they do not have the skills internally to execute their plans. For these organisations to fulfil their potential in the digital realm, they will have to invest in either new training or new staff.[50]

Along with the need for appropriately skilled people working in arts organisations with the requisite digital skills is the ongoing skills imperative around the burgeoning tech sector in the UK, with its strong links across the creative industries. A GfK survey of tech leaders based around Silicon Roundabout in London, emphasised that:

'The biggest single challenge facing London's tech businesses is a shortage of skilled workers in the jobs market. These are not traditional skills like finance, HR and sales, but specialised digital and technology skills like coders, developers and usability specialists.' – GfK, Tech Futures[51]

While the study conducted by GfK is localised to East London's tech hub, the problems it presents are stark in terms of the skills shortages. 70% of business leaders feel that there is a shortage of programmers, which are the hardest staff to recruit in the sector. Furthermore, 42% of business leaders feel that they have problems retaining staff.

There is an interesting link across the tech roles presented within this research and roles across the design, music, performing arts and other, perhaps more established, 'creative' sectors. Within the tech sector, the most in demand skills are technical in nature. However these also represent the roles that are most difficult to recruit into for employers. More specifically, 59% of tech businesses have attempted to recruit coders and developers over the past 12 months and 90% have found them fairly or very hard to find.[52] This is echoed in those more traditionally 'creative' sectors such as theatre and music, where technical occupations are increasingly in demand, but there is a shortfall of suitably skilled people for those roles.

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[49] Nesta, Arts Council England and AHRC (2014), Digital Culture 2014: How Arts and Cultural Organisations in the UK use Technology.
[50] Ibid.
[51] GFK (2013), Tech City Futures.
[52] Ibid.

The explosive growth of roles in technology-based occupations, particularly in the intersection across creative and digital areas means that skills shortages are more pronounced, and may have more of an impact upon the individual business than in slightly more static growth areas such as the design or music industry. However, the problems tech leaders identify – such as the need to rely on a freelance workforce and the use of interns as an alternative method to address staff shortages all echo across the more general creative workforce.[53]

A growth in digital occupations both related to the technology sector and the wider creative industries is a key area of skills development over the next five years. More so than other occupations, these roles may be particularly globalised, with competition for talent coming from major cities and technology hubs around the world, rather than just being restricted to the UK.

'T'-shaped skills in the creative industries

'The ideal worker of the next decade is "T-shaped"—they bring deep understanding of at least one field, but have the capacity to converse in the language of a broader range of disciplines. This requires a sense of curiosity and a willingness to go on learning far beyond the years of formal education. As extended lifespans promote multiple careers and exposure to more industries and disciplines, it will be particularly important for workers to develop this T-shaped quality.' – Institute for the Future, Future Work Skills[54]

One area highlighted by the recent DCMS work on statistical measurement has been the growth, and as a consequence the premium, placed on creative workers outside the creative industries.[55] Increasingly, other sectors look to creative and lateral thinkers in their corporations and businesses to drive competitive advantage.

As research by the Design Council notes, within the wider economy design is used 'as the capacity to solve customers' problems' and was most effective when used from the beginning to the end of the product or service development. This ties into the Institute for the Future's ideas that one of the main skill sets of the future will be that of the 'T' shaped worker.[56] In this field the T-shaped worker has a design specialism, but is able to work across a whole range of areas to do with a large business or corporation.

[53] GFK (2013), Tech City Futures.
[54] Institute for the Future, (2011), Future Work Skills 2020.
[55] DCMS, (2015), Creative Industries Economic Estimates Statistical Release.
[56] Design Council, (2014), Leading Business By Design: Why and How Business Leaders Invest in Design.

In advertising, some thinkers believe that these 'T' shaped people have a better sense of collaboration and understanding, and are more adaptable to changes in job structures and functions.[57] There are therefore major concerns that this type of polymath, or people with a broad educational range and knowledge of STEM (Science, Technology, Engineering, Maths) are being cut-off 'downstream'. That is to say, the traditional education system is forcing a prioritisation of one area over the other, rather than allowing students to easily study across STEM areas and arts in one curriculum.[58]

This type of change is also being recognised, in a slightly different type of language, by major figures and organisations in the education sector. A report for the global education company Pearson by Professor Sir Roy Anderson emphasised that curriculum change for 16-18 year olds should emphasise the following areas:

"…communication in English and in foreign languages, competence in mathematics, science and technology and digital competence, learning to learn individually and as part of a team, personal, interpersonal and intercultural competence, including an understanding of codes of conduct and the importance of business ethics, a sense of initiative and entrepreneurship, creativity and cultural awareness." - Pearson, Making Education Work[59]

The literature around 'T'-shaped workers primarily focuses on their values within organisations, however within the creative industries there may be a further dimension to both the wide ranging knowledge and the deep specialist capabilities. This extra dimension within the sector relates to the need for entrepreneurial and business skills, which are explored in the following section.

Professional skills within the creative sphere

Management and leadership in the creative industries has been an ongoing concern for a number of years in relation to the people that are driving growth in the sector. The proliferation of micro-businesses and sole traders has created an ecosystem in which a large part of the workforce is required to have the business and entrepreneurial ability to match creative vision. As the Create UK strategy sets out:

'Companies of all sizes need to develop leadership and management skills to help them build efficient business models. This is particularly important for the creative sector, where the majority of businesses are SMEs or smaller, but need leaders with the skills to make the business thrive.'
– Creative Industries Council, Create UK [60]

[57] Financial Times, (2012), Dawn of the Devoted All-Rounder.
[58] Creative Industries Council (2014), Create UK: Creative Industries Strategy.
[59] Pearson (2014), Making Education Work: A Report from an Independent Advisory Group Chaired By Professor Sir Roy Anderson.
[60] Creative Industries Council (2014), Create UK: Creative Industries Strategy.

This demand for leadership and management can also be seen in the wider economy. The Education and Skills Survey, published annually by the CBI, found that over the next three to five years 76 % of employers expected their businesses to need more people with leadership and management skills. While this figure has been consistently over 60 % annually since 2010, there seems to be evidence that this is becoming even more important within the economy.[61]

In terms of the barriers to companies wishing to grow dramatically, research by the OECD has shown that the most major barrier may not necessarily be skills related, but is instead based around psychological or motivational factors for the leadership group of a business. High growth businesses are also often determined by the mind-set of what they can control in the workspace, for example the skills of their team or the cash flow available to them, rather than external factors such as competition from other businesses.[62]

Different areas of the creative industries are acknowledging and acting on the need to foster entrepreneurialism, management and leadership within education. The Crafts Council, for example, have made bringing 'craft enterprise into education' a central strand of their education manifesto, due to a belief that if craft makers are to meet their potential in the economy, they must have the enterprise skills to match up to their technical craft abilities.[63]

Within the cultural heritage sector, the Museums Association (MA) have also highlighted the need for an increased focus on management and leadership that focuses on fostering the right set of behaviours and practices throughout an organisations, rather than being focused on a single figure with 'charisma'. The MA also detected urgency in the situation, at a time where there is considerable change in funding structures for museums, along with changes to how people engage with museums digitally and in person.[64]

While the types of leadership and management skills needed to succeed do change depending on whether people are working within larger institutions or micro-businesses, the literature does seem to suggest that they are of increasing importance across the creative industries during a period where public expenditure is tighter and where global competition may become stronger. Making management and leadership training relevant to creative careers, while also bolstering entrepreneurship skills amongst young people will be vital to ensuring the future strength of the creative economy.

[61] CBI/Pearson (2014), Gateway to Growth: CBI/Pearson Education and Skills Survey 2014.

[62] OCED (2012), Entrepreneurship Skills for Growth-Orientated Businesses.

[63] Crafts Council (2014), An Education Manifesto for Crafts and Making.

[64] Museums Association (2013), Working Wonders: An Action Plan for the Museums Workforce.

Technical skills across areas of the creative industries

One of the common denominators across skills shortages in the whole economy is the extent to which there are problems in the labour market with filling what could be seen as skilled technical roles. The UKCES Employer Skills Survey shows that 39 % of all 'skilled trades' vacancies are hard to fill, in comparison with 33 % in 2012. Associate Professional and technical occupations also experienced a dramatic increase in terms of the numbers of vacancies that were reported as being hard to fill due to a lack of skills in applicants, rising by 8 % to 26 % in 2013 of all vacancies in this area.

There is a broad range of anecdotal and primary evidence that occupations related to technical, specialised areas of work that run parallel to much of the creative work in the sector are increasingly in demand. This reads across to a whole range of occupations, from backstage and offstage roles in theatre and live music, to conservation specialists in the historic environment sector, to skilled workers within the jewellery sector. Below we examine some specific areas where there are perceived shortages or gaps in the technical abilities of workers within the creative industries.

DESIGN

Within the design industry, an individual's technical abilities are absolutely central to the ability to earn employment out of university or initial starting roles. Online design magazine It's Nice That explored the dichotomy between practical skills and artistic excellence in design education around Europe. Here, there is an ongoing tension between those that are 'primed for artistic and cultural excellence' and those that have the practical ability to thrive in a studio environment. There was also a sense of agreement across a range of interviewees that the speed at which young designers have to work at, and the range of experience that they might gain in a working environment is key to their success.[65]

Creative & Cultural Skills has collected some primary data which backs many of these arguments – particularly that designers are not always as equipped for technical and client-focused work as they are for autonomous creative work. 53 % of the industry place a premium on hiring those with the requisite technical skills in their work, and furthermore require individuals to slot straight into their studio environment or way of working with limited training.[66]

[65] It's Nice That (2014) Top Creatives Discuss Design Education Around the Rest of Europe.
[62] OCED (2012), Entrepreneurship Skills for Growth-Orientated Businesses.
[66] Creative & Cultural Skills (2013), Pathways to Design: Young People's Entry into the Design Industry.

The Design Commission place an emphasis on technical abilities in their report Designing the Digital Economy. The report gathered information from a range of key practitioners in the design sector who stressed that often young people and those entering the industry did not have the correct software abilities to work in the digital sphere. There are issues with the proliferation of open-source programmes and changes to software programmes within the industry. Within this, design educators have to keep pace with a changing landscape in order to ensure that people emerge ready to fit into an increasingly digital-focused sector.[67]

Despite these arguments, there is still a lack of real engagement between the education sector and businesses. Only 14 % of design businesses feel that they are very engaged with education or training providers, while just under a third (32 %) feel they are not at all engaged.[68] The sector's engagement with local or regional education providers will have to increase, in order to ensure an average standard of education for the sector is not dragged down, leaving only a few centres of excellence with strong industry links throughout the UK.

JEWELLERY AND CRAFT: MAKING AND HAPTIC SKILLS

Within craft and jewellery there is clearly an explicit focus on the technical skills of the sector. Composed mainly of designer-makers or tiny businesses, craftspeople often do not have the ability to specialise or compartmentalise business, technical design or 'making' within their work. Instead, technical specialisation is expected to be held by workers along with broader business-based skills.

The main challenge to this technical skills base comes from the reduction in the pipeline of craft talent at an earlier age. From 2007-2013 learner numbers in craft-related GCSEs (14-16 year old qualifications) fell by 25 %. Allied to this, Higher Education course numbers are also reducing within this sphere. There is a paradox across craft as a whole in that there is a wave of part-time or hobbyist makers selling through Etsy or other platforms outside their 'day job', however there is a reduction in the amount of formalised pathways to gaining a depth of knowledge and practice in the field of craft.[69]

Within jewellery, 67 % of businesses claimed that they either had a current skills need in 2013, related to either a skills shortage or gap, or they were anticipating one over the next three years. 'Using CAD software' is seen as a specific skills gap or shortage for over a third of employers. Meanwhile, 'using graphic design software' and 'designing for mass market' are seen as key skills shortages or gaps for one in five employers.

'Within jewellery, 67 % of businesses claimed that they either had a current skills need in 2013, related to either a skills shortage or gap, or they were anticipating one over the next three years.'

[67] Design Commission (2014), Designing the Digital Economy: Embedding Growth Through Design, Innovation and Technology.

[68] Creative & Cultural Skills, Pathways to Design: Young People's Entry into the Design Industry (2013)

[69] Creative & Cultural Skills (Prepared by Private 2 Public Ltd) (2014), Jewellery Industry Blueprint.

As can be seen from table 3 the skills that are still either shortages or gaps within the sector are mostly technical, or come from work-based experience.

Table 3: Top 10 key design skills, Top 10 gaps/shortages

Top 10 Key Skills	Respondents	Top 10 Gaps/Shortages	Respondents
Developing design ideas	86 %	Using CAD software	34 %
Understanding a brief	78 %	Using graphic design software	21 %
Generating concepts	73 %	Designing for mass market	18 %
Pricing & designing to a price point	70 %	Hand carving, sculpting or model making	18 %
Sketching & rendering by hand	62 %	Analysing trends	15 %
Hand carving, sculpting or model making	45 %	Sketching & rendering by hand	14 %
Using graphic design software	43 %	Create technical drawings	14 %
Create technical drawings	40 %	Pricing & designing to a price point	11 %
Analysing trends	38 %	Generating concepts	7 %
Using CAD software	32 %	Developing design ideas	7 %

PERFORMING ARTS AND MUSIC: TECHNICAL ROLES

The live events, music and performing arts sectors in the UK have seen a period of growth over the last ten years. Harnessing a professional workforce for an increasingly discerning and savvy group of both overseas tourists and residents who travel to festivals, shows and theatre performances is therefore paramount.

However, there may be challenges to overcome in terms of the skills needs of live events professionals working across these areas. Work is often seasonal within music and areas related to festivals, meaning there are sporadic opportunities to earn. Furthermore, individuals may not be tied to specific organisations or companies, which mean that skills development may not be prioritised within the role. This also raised issues around health and safety, and personal development within roles.

Part of these issues is offset by organisations such as the Association of British Theatre Technicians (ABTT). The membership organisation runs training aimed specifically at developing the health and safety levels and workforce competence in areas related to live entertainment. These provide a degree of transparency to workers in the sector with regard to their abilities and qualifications.[70]

Similarly, PLASA, an organisation dedicated 'to supporting those who work in the entertainment, events and installation industries' has a number of schemes, including a National Rigging Certificate and an Entertainment Technician Certification Programme in order to provide a level of professionalization and ethical standardisation to the sector.[71]

Increased convergence across technical roles, and the impact that this has on skills needs is also becoming an issue. Recording of live events, streaming services of events and cross-multimedia platforms are creating new complexities for the live events sector, and increasingly the barrier between the digital and the physical is being broken down in this regard. Skills development in this area needs to focus not just on the practical, technical skills of workers but on the breadth of areas that they may have to work across through their job role.

CULTURAL HERITAGE: SPECIALISED ROLES

The historic environment and cultural heritage sector stands slightly apart from the new wave of digital creative and technological industries. The sector is defined by highly specialised staff often linked to specific institutions such as museums and heritage sites, rather than working for smaller micro-businesses. These institutions often also need higher levels of support staff than other areas of the creative industries that may not have tangible assets, such as buildings, to manage and maintain.

[70] See, http://www.abtt.org.uk/careers/
[71] See, http://www.plasa.org/pd/

'Within cultural heritage institutions 68 % of employers believe the ability to balance specialist skills and business skills will be the most important skill set in the future.'

Despite these differences, the focus on technical skills is still apparent within the field. Within cultural heritage institutions 68 % of employers believe the ability to balance specialist skills and business skills will be the most important skill set in the future. However, almost half (47 %) believe that 'very specific' specialist skills would be the most significant skill set to harness.[72]

Indeed, this relates to the 'T-shaped' model of skills discussed earlier, where a specific specialism (conservation, archaeology etc) are matched to a new savvy employer across areas such as creative learning, fundraising, digitalisation and dissemination of heritage and culture in the public sphere and community engagement (to name a few areas).

These issues are compounded by a workforce that may be set to retire without sufficiently passing on their skills and knowledge. 52 % of museums felt that they were set to lose skills through the retirement of their workforce without replacement, while this figure is even higher in libraries and archives, at 61 %. The challenge then, is to both recalibrate the cultural heritage workforce to the modern and changing conditions it faces, while maintaining and promoting the technical and specialist elements which are so crucial to its make-up.[73]
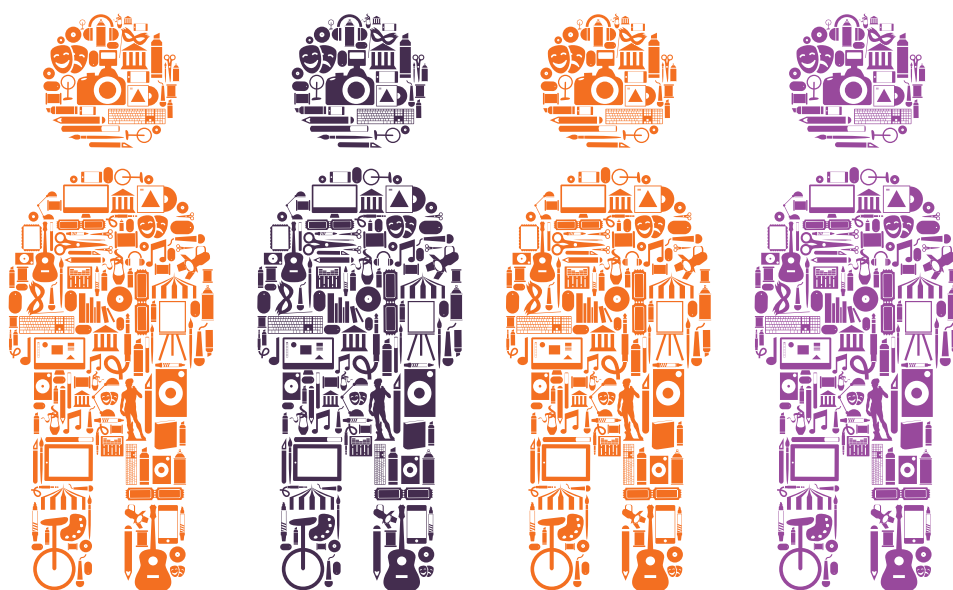
[72] Creative & Cultural Skills and English Heritage (2013), The Historic Environment and Cultural Heritage Skills Survey.
[73] Ibid.

5 Conclusion

The literature points to a number of important areas where skills requirements will become more acute over the next decade. The intersection between the digital world and the creative industries offers great potential, for example, and will depend on a workforce that is recalibrated to mix creativity with technical coding and programming skills, as well as knowledge of STEM subjects.

There are also significant external factors that will impact upon skills needs, such as the current climate of public funding. The growth in the base of self-employed workers is an important factor to consider in skills planning, which has been reported for some time but will increasingly require a workforce equipped to operate independently and in entrepreneurial ways.

The need for professional skills, both for sole traders, freelancers and employees in larger businesses, is paramount as the sector responds to the economic climate. Having the capability to diversify income streams, reach new markets, undertake robust financial planning and respond to the changing demands of customers will be key in the next decade. The evidence also shows that in organisations, strong leadership skills and management capabilities are also vital to accommodate change.

From the literature examined, higher level technical skills and knowledge will continue to be essential to the creative and cultural industries in the next decade. The creative sector needs people with a depth of technical skills; those who can 'make and do' as well as conceive ideas.

The statistical evidence shows that there is increasing scope for creative workers to move outside of a narrow range of industries in order to bring their skills to the wider economy. Creativity in leadership, for example, is widely valued, and has become more prevalent as a specific skill-set. While it is highly likely that many of the job roles for the future have not yet been determined, fostering an environment where creativity can thrive is important.

The positive future outlook for the creative industries is testament to the resilience and innovation of the people working within this sector. Looking forward though, there is still a constant need to hone, develop and advance the abilities of the workforce that feeds into this ecology.

This review has gone some way to show the specific drivers and themes that may serve to shape that over the next decade. Within this, Creative & Cultural Skills will maintain a focus on delivering change through initiatives focused on giving young people opportunities, ensuring that talent is utilised within the sector and helping to foster economic growth through a stronger workforce. We look forward to working with you in the next decade.

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